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Final Report

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Abstract

The objectives of this report are to (1) discuss the policy context issues related to the possible expansion of accumulation provisions in the context of Jordan's free trade agreement with the United State, (2) identify and propose solutions to technical issues in design of an accumulation rule that Jordan wishes to propose to extend the Jordan-United States Free Trade Agreement, and (3) identify those inconsistencies among the origin regimes used under the various FTA agreements of the United States that potentially preclude Jordan's accumulation of origin with other US FTA partners.

Abbreviations and Acronyms

ACP	African, Caribbean and Pacific countries (EU grouping)
AFTA	ASEAN Free Trade Agreement
AGOA	Africa Growth and Opportunity Act
APEC	Asia Pacific Economic Cooperation
ASEAN	Association of South East Asian Nations
CAFTA	Central America Free Trade Agreement (with the United States)
CBTPA	Caribbean Basin Trade Partnership Act
COMESA	Common Market for East and Southern Africa
EC	European Commission
EEA	European Economic Area
EFTA	European Free Trade Agreement
EU	European Union
FTA	Free Trade Agreement
FTAA	Free Trade Area of the Americas
HS	Harmonized System
ISI	Integrated Sourcing Initiative
IT	Information technology
JUSFTA	Jordan US Free Trade Agreement
MEFTA	Middle East Free Trade Area
MFN	Most favored nation
NAFTA	North American Free Trade Agreement
QIZ	Qualifying Industrial Zone
ROO	Rules of Origin
SAARC	South Asia Association for Regional Cooperation
SACU	Southern Africa Customs Union
SADC	Southern Africa Development Community
SAFTA	South Asia Free Trade Agreement
SAPTA	South Asia Preferential Trade Agreement
UAE	United Arab Emirates
USTR	United States Trade Representative
WTO	World Trade Organization

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Preface

At the Jordan-United States Free Trade Agreement (JUSFTA) Joint Committee Meeting in June 2004, the Jordan delegation raised with the United States Trade Representative (USTR) the Jordanian Government's interest to modify rules of origin under the JUSFTA to accumulate value added with other US free trade agreement (FTA) partners. The USTR requested that Jordan prepare a discussion paper addressing how and why Jordan could accumulate origin with other US free trade agreement partners. 1) The economic benefits to the United States and Jordan of accumulating origin with other countries and 2) the possible rules for combining content from several countries.

The AMIR Program contracted two trade experts to contribute to a draft discussion paper. Jim Robertson, a trade economist, has written Part One: an overview of the issues. Brian O'Shea, a trade lawyer and former private policy component leader at the AMIR Program, has written Part Two: a technical discussion of cumulation rules and the origin regimes used under different US FTAs.

Executive Summary

PART ONE – The Case for Accumulation

One of the keystones of Jordan's development strategy is the Jordan United States Free Trade Agreement (JUSFTA), signed in October 2000. As the *Preamble* to the Agreement makes clear, one of the central objectives of the JUSFTA is to "promote [US and Jordanian] mutual interest through liberalization and expansion of trade between the two countries."

While there are potentially very extensive opportunities provided to Jordan through the JUSFTA, these are significantly constrained by the rules of origin (ROO) requirements. As a small developing country with severe natural resource constraints, the scope for establishing integrated manufacturing activities where sufficient amounts of the raw materials needed to meet the ROO are produced locally is very limited. In contrast, the United States can meet ROO requirements for virtually any good.

It is this fundamental asymmetry that warrants examination of ways to increase flexibility in meeting ROO requirements through expanded *accumulation* of inputs as a means of expanding economically efficient trade, *while maintaining the necessary requirement that substantial transformation take place in gaining preferential access*. The economic value of preferential access to the US economy for a great many goods cannot be realized without such a provision.

Rules of origin may undermine economic efficiency, usually one of the chief goals of trade liberalization, in several ways. Producers seeking to gain preferential market access may utilize high-cost local suppliers of inputs when low cost inputs are available elsewhere in order to meet ROO requirements. This can make investments in the production of these inputs artificially profitable and lead to resources being drawn to activities where the country has no underlying comparative advantage and there is little prospect that these industries can become internationally competitive.

There are in addition the administrative costs in complying with ROO that should be taken into account. When ROO are highly detailed and include large numbers of sector-specific regulations, many traders will simply forgo claims for preferential or duty-free treatment if the net costs incurred in compliance outweigh the economic savings that may be achieved. This has been a major problem with a number of the European Commission (EC) trade agreements and has also been cited as a drawback with NAFTA.

The goals of the United States being sought through its various trade agreements might be better realized by moving beyond a regional perspective and looking at these FTAs more as a global network of trading partners and as a means for encouraging greater trade liberalization globally – the core objective of the USTR's strategy. *If providing for the accumulation of inputs in meeting the ROO makes sense within a regional agreement such as CAFTA, why should it be any less relevant in a group that is comprised of Jordan, Singapore, Australia, Chile and the Central American countries?*

As Secretary Colin Powell and Ambassador Zoellick indicated in their remarks in Jordan in 2003, the Middle East Free Trade Area (MEFTA) may be moving towards a system of individual free trade agreements that are linked together over time.¹ From Jordan's perspective, expanding accumulation only to encompass MEFTA would appear to be the minimum result achievable, but one that would likely offer very limited economic benefits. The drawbacks of being confined to MEFTA include:

- MEFTA is uncertain and will at best take a number of years to fully implement;
- The generally internationally uncompetitive policy environments in a number of the prospective members and the limited likelihood for substantive reforms;
- The adverse terms of trade with respect to manufacturing among the oil-dominated countries (i.e., the incidence of "Dutch disease"); and
- The broad similarities in the industrial sectors of these countries, suggesting they would likely produce competing goods rather than complementary inputs that would enhance Jordan's scope for expanding trade.

Jordanian manufacturers will increase their support for MFN trade liberalization under the WTO as substantially expanded accumulation under the US FTA becomes available. This is due to the potential costs of developing and implementing large numbers of FTAs. (This was the approach followed by ASEAN, with positive results.) Recognizing that this is a potential outcome of such an initiative would tend to strengthen the argument for acceptance by the USTR. Broader trade liberalization has been one of the core objectives underlying the US strategy in entering into FTAs with countries aiming for greater integration in the global economy.

It has to be anticipated that US FTA partners would need to make some sort of concession in exchange for an expanded accumulation provision. Fortunately, there is an obvious concession that can be offered that would in fact be in the economic interests of the partner countries – some degree of acceleration of their tariff reduction schedules for imports from the United States.

There has been some support voiced by key US firms for expanded accumulation of inputs under FTAs. A group of major retailers, apparel and textile companies issued a statement on 3rd December 2003 stating, in part, "The group supports the inclusion of NAFTA countries within the cumulation provisions of any CAFTA. ... Finally the group believes that CAFTA should include a mechanism for admitting to cumulation FTA partners who agree to the above enforcement provisions." (*News Release, available on the internet.*)

By agreeing to a far reaching accumulation provision amongst its FTA partners, the United States would be strengthening considerably the existing network that it has created in recent years. This would open the door to increased trade between these countries and encourage greater specialization in production that would increase

¹ A transcript of these remarks is available on the USTR web site, www.ustr.gov.

productivity and accelerate economic growth and development. In so doing, it would give greater impetus towards multilateral efforts towards increased trade liberalization.

PART TWO – Defining Accumulation Rules

The rules of origin of the Jordan-US Free Trade Agreement (JUSFTA) define the conditions that a Jordanian or US producer must fulfill to qualify his export for duty-free entry into the free trade agreement (FTA) partner country. In general, the Jordanian producer must be able to demonstrate that his goods are both a “product of” Jordan and that at least 35 percent of the value of the goods is attributable to Jordanian manufacturing operations or Jordan-produced parts and materials.

The purpose of accumulation is to permit Jordanian producers to qualify more easily for these US tariff preferences. In place of Jordan-origin materials or production, cumulation would allow the producer to use inputs from countries operating under separate FTAs with the United States. A good accumulation rule should consider these third-country inputs and production as if fully Jordanian-origin, both for purposes of qualifying the finished product as “product of” Jordan and meeting the 35 percent Jordan content requirement.

At present, the JUSFTA contains only a weak bilateral cumulation rule, which allows Jordanian producers to use US inputs to meet the 35 percent local content requirements, subject to restrictions. The JUSFTA does not now provide for diagonal cumulation, or use of other US-FTA partner inputs.

In the context of the system of US FTAs, diagonal accumulation may be complicated by two factors:

- In US FTA practice, there is limited use and precedent for cumulation of origin.

Unlike the European Union (EU), where cumulation is widely used under the so-called pan-European system of origin, there is only one narrow instance in a US FTA where diagonal cumulation is permitted. This is under the signed (but not yet ratified) US-Central American Free Trade Agreement (CAFTA), which will allow Central American countries to cumulate origin with the North American Free Trade Agreement (NAFTA) partners of the United States, Canada and Mexico, and for limited products (apparel) and quantities.

- Many of Jordan’s potential cumulation partners apply origin regimes different than that of the JUSFTA.

Origin rules found in the different US FTAs are varied and not necessarily consistent from one agreement to another. As a condition of cumulation, the EU requires that all cumulation participants use identical origin rules. This does not appear to be a condition that the United States would apply, at least if the US-CAFTA is precedent.

However, if identity of origin regime becomes a condition of cumulation, Jordan's options for cumulation partners would be limited to Israel, Bahrain, and Morocco. Moreover, the US FTAs with these four countries apply inconsistent origin rules for textiles, which might preclude cumulation of origin for products of that sector.

Taking these complications into account, this paper suggests that Jordan may wish to propose a cumulation rule on the following basis:

- The rule should propose cumulation based on the US-CAFTA model.

Under this model, it does not matter whether the potential cumulation partner's origin rules are identical to Jordan's. This would open the possibility of cumulation to countries outside the Middle East. What is required is that the material or component sourced by the Jordanian producer comply with JUSFTA origin rules; if so, it can be counted as an "originating" material – that is, as if were Jordanian origin for purposes of towards meeting the Jordan producer's "product of" and 35 percent local content requirements.

The US-CAFTA model imposes other conditions on use of cumulation. One is that an agreement between Jordan and the third-country cumulation partner must provide "reciprocal" treatment; that is, it must allow US inputs to be used in the same manner vis-à-vis trade between Jordan and the third country. The other major condition is an agreement on customs verification; the third country must allow US Customs the ability to verify information related to the third-country supply including, possibly, on-site, verification visits to the third country.

- Extension of the Singapore FTA Integrated Sourcing Initiative

Jordan should seek inclusion in the Integrated Sourcing Initiative (ISI) of the US-Singapore FTA. The ISI allows a producer to count as "originating" certain information technology (IT) components and products and medical devices imported from Singapore or the United States. The innovation of the ISI is that origin rules – and any inconsistency between Jordan and Singapore's FTA origin regimes – are irrelevant, and producer's compliance is greatly simplified. Foreign parts and goods would be considered Jordanian-origin simply because they are imported from Singapore or the United States, without regard to their actual country of origin. When the Jordanian manufacturer incorporates these Singapore or US-sourced parts into a product exported to the United States, he may count their full value to qualify the finished good under JUSFTA rules.

In the design of the proposed cumulation rule, certain technical adjustments also will be required to the current rules of origin US-Jordan to take account of third-country sourcing. The most important of these are:

- A rule is required to identify the country of origin of a product – and the applicable US tariff preferential rate that applies – when a Jordanian export

incorporates the third-country cumulation partner's inputs, which may equal or exceed the value of Jordanian inputs.

- An adjustment will be required to the “direct transport” rule of the agreement to allow Jordan or its cumulation partner to perform tail-end processing of products of other country, without losing tariff preferences.
- Jordan should seek to liberalize its current bilateral cumulation rule with the United States. This narrow bilateral cumulation rule limits the utility of US inputs in qualifying Jordan products for tariff preferences. It is a narrower rule than applied under any other Middle East FTAs, with the exception of Israel. This would appear to put Jordan at a disadvantage vis-à-vis those other countries, under agreements which otherwise share similar origin regimes. In any event, that restrictive bilateral cumulation rule should not be used as the model for Jordan's accumulation with other US FTA partners, unless it is first brought into conformity with the Bahrain or Morocco rules.

1. Part One – The Case for Accumulation

1.1 Introduction

*It should be kept in mind that virtually all of the free trade agreements mentioned in this paper, including Jordan's agreement with the US, go well beyond the trade in goods. Most include provisions to liberalize trade in services, investment provisions, address labor issues, environmental concerns and intellectual property rights. The issues considered here, accumulation and the rules of origin, are related only to trade in goods. It is quite likely that over time the other aspects of these agreements will be more economically important for the US and partner countries than the expansion in the trade in goods.*²

Jordan, like many small developing countries, relies upon expanding foreign trade as a foundation on which to base economic growth and development. And also like many countries, Jordan has been pursuing bilateral and regional trade agreements as a means to lock in domestic trade reforms as well as to increase market access abroad. One of the keystones of this development strategy is the Jordan United States Free Trade Agreement (JUSFTA), signed in October 2000. As the *Preamble* to the Agreement makes clear, one of the central objectives of the JUSFTA is to “promote [US and Jordanian] mutual interest through liberalization and expansion of trade between the two countries.”

Like all preferential trade agreements, the JUSFTA limits the goods that can receive preferential market access through the rules of origin (ROO). This is necessary to ensure that a partner to the agreement does not serve simply as a point of transshipment for goods originating in other countries to gain preferential access. The ROO are designed to ensure “that an article or material, not wholly the growth, product or manufacture of a Party be *substantially transformed* into a new and different article of commerce, having a new name, character, or use distinct from the article from which it was so transformed.”

For goods that are wholly produced within one of the parties to the agreement, such as agricultural commodities, this is straightforward. The complications arise when a good is manufactured using raw materials or intermediate goods imported from a third party. For such types of goods, criteria are established that are intended to ensure that the good is substantially transformed within the country that is a party to the agreement. In the JUSFTA it is required that the good embody domestic content comprising the value of materials originating in the country plus the costs of production are not less than 35 percent of the value of the good. (There are other rules that apply for some types of goods. See Section 4 below for a more detailed discussion of this requirement.)

While there is no doubt that there are potentially very extensive opportunities provided to Jordan through the JUSFTA, these are significantly constrained by the ROO requirements that must be met. As a small developing country with a population of around 5 million

² From para 3, Annex 2.2, Rules of Origin, *Jordan US Free Trade Agreement*. Italics added.

people and severe natural resource constraints, the scope for establishing integrated manufacturing activities where sufficient amounts of the raw materials needed to meet the ROO are produced locally is very limited. In contrast, for the United States as the largest and most developed economy in the world, meeting the ROO requirements for virtually any good is unlikely to represent any difficulty at all. It is this fundamental asymmetry that warrants examination of ways to increase flexibility in meeting ROO requirements through expanded *accumulation* of inputs as a means of expanding economically efficient trade.³

The question of accumulation usually arises when there are three or more countries participating in a free trade agreement (FTA). This permits raw materials and intermediate goods produced by one or more members to be used in the production of a good by another member to be treated as though they originated by another member for the purposes of meeting the ROO. More specifically, for example, the US Central America Free Trade Agreement (CAFTA) includes the following provisions:⁴

Article 4.5: Accumulation

1. Each party shall provide that originating goods or materials of one or more of the Parties, incorporated into a good in the territory of another Party, shall be considered to originate in the territory of that other Party.
2. Each Party shall provide that a good is originating where that good is produced in the territory of one or more of the Parties by one or more producers, provided that the good satisfies the requirements of Article 4.1 [*Originating Goods*] and all other applicable requirements in this Chapter.

While recognizing that this issue typically arises in the context of *regional* trade agreements, such as CAFTA, it is worth examining this in a somewhat broader context. The nature of global trade is changing rapidly and the economic rationale for promoting the formation and integration of regional trading blocs may be becoming less relevant. Jordan provides a useful example on how this perspective is changing in an increasingly globalized economy.

In his speech to the National Press Club in Washington, DC in 2002, Ambassador Robert Zoellick offered a far reaching “Ten Point Agenda for Trade” that included, *inter alia*, opening markets, promoting security, encouraging democracy, revolutionizing global trade in services, and aggressively enforcing US global and special trade rules.⁵ In the two years since that address, the United States Trade Representative (USTR) pursued an activist and innovative strategy with a growing number of FTAs as a central element. A

³ The terms ‘accumulation’ and ‘cumulation’ have been used interchangeably by the USTR and others. The former will be used in this paper.

⁴ *United States – Central America Free Trade Agreement*, Chapter Four, Rule of Origin and Origin Procedures. (See USTR web site.)

⁵ “Globalization, Trade and Economic Security”, Remarks delivered by Ambassador Robert Zoellick at the National Press Club, Washington, DC, 1 October 2002.

large part of the rationale for entering into FTAs has been the reforms that these agreements can stimulate in trading partners, especially among developing countries. This aspect of the USTR's approach has not been without its critics. Nevertheless, only two years later there are already signs that this approach is producing notable positive results. However, ultimate success will depend critically upon ensuring that the expansion of trade with the United States is based upon a strong foundation of economic efficiency – with partner countries building upon their underlying areas of comparative advantage.

This paper looks at issues related to the possible expansion of accumulation provisions in the context of Jordan's FTA with the United States as a potentially important way to build upon this foundation and ensure that its underlying goals are achieved. In the next section the economic arguments for expanded accumulation in the context of rules of origin are examined. This is followed by a reconsideration of the role of *regional* agreements as the basis for trade agreements in an increasingly globalized world. In Section 4 the accumulation provisions in existing agreements are briefly reviewed. Finally, in Section 5, several proposals for expanding accumulation provisions consistent with achieving the goals elaborated in Ambassador Zoellick's speech are presented.

1.2 The Economics of Rules of Origin and Accumulation

One of the central points made in this paper is that it makes good economic sense for both the United States and its FTA partner countries to broaden the ROO by permitting the accumulation of inputs in meeting these requirements. More specifically, such an initiative would expand the range of goods that could be freely traded under these agreements and also would enhance economic efficiency by reducing the scope for distorted decisions on the use of raw materials and intermediate goods. In this section, the economic arguments that support such a move are briefly reviewed.

Rules of origin were originally developed to assist in the collection of consistent trade statistics and as such were intended to be economically neutral – that is have essentially no impact on the level or composition of trade taking place.⁶ However, as the number and scope of preferential trade agreements have grown rapidly in recent years, ROO have increasingly assumed much greater importance.⁷ In some cases, the ROO have been used much more aggressively to actually limit the trade that can take place under an agreement, in effect to offset the reductions of tariffs being implemented.⁸ There have

⁶ See E. Ivan Kingston, "The Economics of Rules of Origin" in *Rules of Origin in International Trade: A Comparative Study*, Edwin Vermulst, Paul Waer and Jacques Bourgeois, (eds,) University of Michigan Press, Ann Arbor, Michigan, 1994.

⁷ In Ambassador Zoellick's speech to the Washington Press Club cited above, he mentions the changes in trade that have taken place since he first studied economics in college in 1971. It is highly likely that in his courses on international trade at that time that rules of origin were never mentioned. See for example one of the most widely used textbooks on trade at that time by Caves and Jones [1973] which does not mention ROO.

⁸ One reason for this may be the requirements under the GATT/WTO that require preferential trade agreements to cover substantially all goods (Article XXIV). Countries entering under such agreements are

certainly been agreements where the ROO have been sufficiently restrictive to preclude substantial amounts of trade taking place through preferential channels. (For example, it has been argued that a relatively restrictive approach taken by the European Commission to the ROO in its trade agreements led to low levels of utilization of these preferences, such as with the African, Caribbean and Pacific countries (ACP) countries under the Lomé Convention and Cotonou Agreements).

1.2.1 The Economic Efficiency Costs of Restrictive ROO

The ROO used in preferential agreements typically go beyond the criteria used in general (i.e., non-preferential) ROO that aims to establish only that *substantial transformation* takes place to confer origin. (Note that in this discussion the rules pertaining to wholly grown or produced goods, such as agricultural produce, are not relevant. The focus here is on goods where production relies on traded inputs, such as most manufacturing activities.) Preferential ROO are often described in terms of requiring that a minimum level of “value added” take place in the producing country. But this is not value added in the sense normally used by economists – the returns to primary factors of production, land, labor and capital. In this context it usually entails domestic value added *plus* the value of domestically-produced inputs or equivalently it imposes a ceiling on the amount of imported (non-originating) inputs that can be used.

Rules of origin may undermine economic efficiency, usually one of the chief goals of trade liberalization, in several ways.⁹ Producers seeking to gain preferential market access may utilize high-cost local suppliers of inputs when low cost inputs are available elsewhere in order to meet ROO requirements. This can make investments in the production of these inputs artificially profitable and lead to resources being drawn to activities where the country has no underlying comparative advantage and there is little prospect that these industries can become internationally competitive. ROO in preferential trade agreements are sometimes justified on “development” grounds in that they might stimulate investment in these sorts of backward linkages. In a somewhat perverse way, many of the same arguments that were formerly used to justify trade restrictions as part of an import substitution industrialization strategy are now used to support the application of restrictive ROO requirements – leading to many of the same sorts of drawbacks.

There are in addition the administrative costs in complying with ROO that should be taken into account. When ROO are highly detailed and include large numbers of sector-specific regulations, many traders will simply forgo claims for preferential or duty-free treatment if the net costs incurred in compliance outweigh the economic savings that may be achieved. This has been a major problem with a number of the European Commission (EC) trade agreements and has also been cited as a drawback with NAFTA.

required in theory to eliminate all barriers to trade, but the ROO provides what has proven to be a ready way around this provision.

⁹ See for example Kala Krishna and Anne O Krueger, “Implementing Free Trade Areas: Rules of Origin and Hidden Protection” in *New Directions in Trade Theory*, Jim Levinsohn, Alan V Deardorff and Robert M Stern, (eds), Studies in International Trade Policy, University of Michigan Press, 1995.

In a 1997 speech, John P. Simpson, then Deputy Assistant Secretary for Regulatory, Tariff and Trade Enforcement at the US Treasury Department and one of the architects of the NAFTA rules of origin, noted that the reams of paper required to explain NAFTA's very detailed rules of origin means that many companies, particularly small companies, chose not to use the NAFTA in cross border transactions within North America. Mr. Simpson noted that the chief cause of red tape in the NAFTA were regional value content requirements, which he described as having "Byzantine complexity" requiring companies to maintain records they never kept before, to require information from suppliers that they never needed to give before, and to provide certifications about the origin and regional content if all goods shipped to customers across borders. The result Mr. Simpson argued was a set of rules that reflect commercial and political interests more than any rational, consistent principle of free trade.¹⁰

1.2.2 Expanded Accumulation of Inputs

Broadening the scope of the ROO by allowing countries greater flexibility to accumulate inputs would help to alleviate some of the economic efficiency costs in meeting ROO requirements and would make the JUSFTA and other US FTAs more effective tools in achieving reforms and expanding trade. While not a panacea, this would help to reduce some of the distortions leading to the misallocation of resources, but it should also be noted, it might also present some additional administrative challenges. (Details of these proposals are discussed further in Section 5 below.)

It is important to recognize that limitations imposed by restrictive ROO tend to fall more heavily on smaller economies, such as Jordan, than they do for larger, more diverse countries, such as the United States. Very simply, the larger the size of the domestic economy, the greater will be the scope for developing competitive production of raw materials and intermediate goods that would permit greater utilization of the opportunities provided through preferential trade agreements. It should also be emphasized that this is just one dimension of the more fundamental issue that the costs of protection and maintaining restrictive trade regimes tend to be higher for smaller countries than for larger countries. This is because international trade is necessarily a much more important factor in allowing a small country to concentrate its activities in areas where it maintains a comparative advantage.

If, for example, as suggested below, Jordan were able to utilize inputs produced in other countries that have FTAs with the United States in meeting its ROO requirements, it would expand the range of goods that it could manufacture and trade through the JUSFTA. By relying on more efficient producers of intermediate goods, there would be less of an incentive to invest in the inefficient production of these goods simply to take advantage of the market access opportunities available under the FTA. For example,

¹⁰ See also "Assessing the Effects of NAFTA's Rules of Origin" by Olivier Cadot, *et al*, June 2002, which provides an analytical framework for measuring of the effects of ROO. This paper was presented at a NAFTA workshop is available on the World Bank's web site.

agricultural commodities produced competitively in Australia might be used in processed foods manufactured in Jordan for export to the United States.

The ultimate objective in expanding accumulation in the context of US FTAs should be to provide a stronger foundation for expanding economically efficient trade amongst partner countries while maintaining the necessary requirement that substantial transformation take place in gaining preferential access.

It has been argued that permitting accumulation under preferential trade agreements has the potential to make the problem worse.¹¹ This reflects the possibility that accumulation would lead to maintaining inefficient producers of inputs based entirely on the subsidies inherent in preferential access. But this need not be the case, especially when looks at a system of FTAs that cut across regions, such at the strategy being pursued by the USTR. This is examined further in the next section.

1.3 Moving Beyond Regionalism in Trade Agreements?

The question of extending accumulation under FTAs inevitably leads to issues regarding the regional approach being following by the United States, European Union (EU) and others. Accumulation is usually an issue only within the context of a regional agreement. The CAFTA is a case in point. The EU approach is also very much based on reaching agreements with regional trading partners, even to the extent of forming regional groups for this purpose.¹²

In this paper it is being suggested that the goals of the United States being sought through its various trade agreements might be better realized by moving beyond a regional perspective and looking at these FTAs more as a global network of trading partners and as a means for encouraging greater trade liberalization globally – the core objective of the USTR’s strategy. In part this recognizes that in a world characterized by increasing global economic linkages the notion of geographically distinct regional blocs is less and less relevant. This is driven to some extent by technological advances and declining transportation costs, but also by increased diversification of production processes. *If providing for the accumulation of inputs in meeting the ROO makes sense within a regional agreement such as CAFTA, why should it be any less relevant in a group that is comprised of Jordan, Singapore, Australia, Chile and the Central American countries?*

One reason why many regional trade blocs have failed to lead to much expanded trade is because the gains from trade are greatest when countries have very different resource endowments and economic conditions. Trade agreements in regional blocs such as in those in South Asia (in South Asia Association for Regional Cooperation (SAARC) this was South Asia Preferential Trade Agreement (SAPTA) and now South Asia Free Trade Agreement (SAFTA) which is currently being negotiated) or Southern Africa (the (South

¹¹ See Kingston [1994], *ibid*.

¹² See Vinod Aggarwal and Edward A Fogarty, *EU Trade Strategies: Between Regionalism and Globalism*, Palgrave Macmillan, 2004.

Africa Development Community (SADC) Trade Protocol and the Common Market for East and Southern Africa (COMESA)) are generally comprised of relatively similar countries, with similar resources being used to produce many of the same goods.

An interesting contrast is provided by the Association of South East Asian Nations (ASEAN) Free Trade Agreement (AFTA), which has had somewhat greater success. This is attributable in part to the somewhat greater disparities in resources and levels of economic development. But a significant factor has likely been the fact that at least among the original six members of ASEAN there was progress in reducing most-favored nation (MFN) trade barriers more or less in line with tariff reductions being implemented under the AFTA. This played a large role in the strong growth in trade between this region and the rest of the world. In parallel there was increased specialization in production and increased trade amongst these countries, especially in intermediate goods embodied in goods traded with the United States, EU and Japan.

1.3.1 The Middle East Free Trade Area (MEFTA)

The US initiative towards the establishment of the Middle East Free Trade Area (MEFTA) warrants particular attention in this context. As Secretary Colin Powell and Ambassador Zoellick indicated in their remarks in Jordan in 2003, MEFTA may be moving towards a system of individual free trade agreements that are linked together over time.¹³ This would build on the existing FTAs with Jordan, Bahrain and Morocco as well as the recently announced efforts to enter into FTAs with Oman and the United Arab Emirates. The implication in their remarks is that eventually this would permit accumulation of inputs in meeting the ROO amongst the member countries of MEFTA.

As with many regional agreements, the underlying motivations for establishing MEFTA are at least as much political as they are economic. (The motivations in entering into FTAs with Jordan and Israel were no doubt also largely political.¹⁴) However, it is clear that political gains being sought will be best achieved if the economic benefits of these agreements are maximized. The goal is (or ought to be) not how much additional trade that takes place among the members of MEFTA, but rather the total amount of trade and increased economic growth and development that results.

Notwithstanding the considerable political benefits that might arise from a more economically integrated Middle East region, the tangible economic benefits for Jordan of this larger group through expanded trade in goods would likely be limited. The non-oil related industrial development in most of these countries is limited. Services tend to be a very large part in the economies of the smaller potential members, such as Bahrain, United Arab Emirates (UAE), Kuwait and Oman. Among the potential MEFTA members, those with larger manufacturing sectors tend to maintain relatively highly

¹³ A transcript of these remarks is available on the USTR web site, www.ustr.gov.

¹⁴ See for example “Free Trade Agreements as Foreign Policy Tools: The US-Israel and US-Jordan FTAs” by Howard Rosen in *Free Trade Agreements: US Strategies and Priorities*, Jeffrey J Schott (ed), Institute for International Economics, Washington, DC, 2004

protected industrial sectors that are often not internationally competitive.¹⁵ Again with several exceptions, there appears to be little enthusiasm or commitment for genuine economic liberalization in these countries, suggesting a likely outcome more along the lines of SAARC and SADC rather than ASEAN.

However, it is also worth noting in this regard that the FTAs being negotiated by the United States go well beyond the trade in goods and include, *inter alia*, reducing the barrier to trade in services and investment. It is important to keep in mind that the benefits that may accrue in these other areas may well be significant.

1.4 Brief Review of Accumulation Provisions in FTAs

Any initiative to significantly expand accumulation would have to take account of the existing and prospective regional and bilateral trade agreements that the United States has in place or that are being negotiated. Specifically, it would have to be consistent with the prevailing ROO.

The United States has taken several different approaches in establishing ROO. (See the table below for a summary. Note that in this discussion the separate rules governing textiles and apparel as well as limited other exemptions are not included.)

- The general 35 percent content requirement rule included in both the Jordan and Israel FTAs has been adopted in the two most recent agreements with Bahrain and Morocco.
- The three bilateral FTAs agreed prior to this, with Singapore, Chile and Australia, included much more varied, product-specific rules. Within these, there were generally two different criteria: a change in tariff heading (i.e., the final product produced was different than the Harmonized System (HS) tariff heading of the inputs used in production) or a content requirement. (Content requirements can be calculated using one of two formulae: the “build up” or the “build-down” methods.) Note that in some cases there is the option to use either of these criteria.
- The CAFTA, which includes Costa Rica, El Salvador, Guatemala, Honduras and (perhaps when several remaining issues are resolved) the Dominican Republic, has product specific ROO along the lines of those included in the Singapore, Chile and Australian FTAs.
- The NAFTA rules, which like those described above, establish detailed, product-specific. However, under NAFTA the rules are more complex and have less

¹⁵ For example, in the *2003 Business Competitiveness Index*, Morocco ranked 49 and Egypt ranked 58 (of 101); see *The Global Competitiveness Report 2003-2004*, Michael Porter, *et al*, World Economic Forum, Oxford University Press, 2004. Note that Jordan ranked 41 on this index. (Other potential MEFTA countries were not included.) In another analysis, the *Economic Freedom of the World Annual Report 2004*, published by the Fraser Institute, covering 123 countries potential MEFTA members ranked as follows: UAE 16, Kuwait 18, Oman 18, Jordan 36, Tunisia 68, Egypt 74, and Morocco 83. These are, of course, only broadly indicative of the relative economic conditions.

flexibility and as such they appear to be more restrictive. (See John Simpson's comments on NAFTA ROO above.) The Caribbean Basin Trade Partnership Act (CBTA) also uses NAFTA ROO.

The accumulation provisions available under these agreements also fall into several general groups.

- The Jordan and Israel FTAs limit the scope for utilizing US sourced inputs to 15 percent of the value of the good produced.
- The subsequent FTAs with Bahrain, Morocco, Singapore, Chile and Australia do not include this constraint and permit full use of US originating inputs in meeting the ROO.
- The NAFTA permits full accumulation among the three member countries.
- The Caribbean Basin Trade Partnership Agreement (CBTPA) is unique in that it permits accumulation with the members of NAFTA as well as its own member states.
- The CAFTA permits full accumulation among the member states and, it has proposed (see below) to possibly permit accumulation including NAFTA countries similar to that provided under the CBTPA.

Table 1. Rules of Origin in Recent US Free Trade Agreements

Trade Agreement	Basic Rules	Accumulation Provisions
Jordan US FTA	35% value content requirement	"The cost or value of materials which are used in the production of an article in one Party, and which are products of the other Party, may be counted in an amount up to 15 percent of the appraised value of the article." (<i>Annex 2.2</i>)
Israel FTA	35% value content requirement	"The cost or value of materials which are used in the production of an article in one Party, and which are products of the other Party, may be counted in an amount up to 15 percent of the appraised value of the article."
Bahrain FTA	35% value content requirement	"Each Party shall provide that direct costs of processing as well as the value of materials produced in the territory of one or both of the Parties may be counted without limitation toward satisfying the 35 percent value-content requirement..."
Morocco US FTA	35% value content requirement	"Each Party shall provide that direct costs of processing as well as the value of materials produced in the territory of one or both of the Parties may be counted without limitation toward satisfying the 35 percent value-content requirement..."
Singapore US FTA	Contains detailed, product specific rules of origin	"Originating materials from the territory of a Party, used in the production of a good in the territory of the other Party, shall be considered to originate in the territory of the other Party." (<i>Article 5.3: Accumulation</i>)
Australia US FTA	Contains detailed, product specific rules of origin	"Originating materials from the territory of a Party, used in the production of a good in the territory of the other Party, shall be considered to originate in the territory of the other Party."

		<i>(Article 5.3: Accumulation)</i>
Chile US FTA	Contains detailed, product specific rules of origin	“Originating materials from the territory of a Party, used in the production of a good in the territory of the other Party, shall be considered to originate in the territory of the other Party.” <i>(Article 4.6: Accumulation)</i>
Central America Free Trade Agreement – Dominican Republic (CAFTA)	Contains detailed, product specific rules of origin	Full cumulation permitted among member countries.
NAFTA	Detailed product specific rules of origin apply	Full cumulation permitted between Mexico, Canada and United States.
Caribbean Basin Trade Partnership Act (CBTPA)	NAFTA rules of origin apply	Full cumulation permitted with CBTPA countries and also with NAFTA
African Growth and Opportunity Act (AGOA)	Detailed GSP product specific rules of origin apply	(A) Cost of materials produced in the US not to exceed 15 percent of appraised value of the article (B) Cost of materials produced in one or more beneficiary sub-Saharan African countries can be applied to meeting ROO. (AGOA Act, HR 434-8)

It should be noted that there are a number of FTAs currently being negotiated by the United States, including SACU, Andean countries (Ecuador, Colombia, Peru and Bolivia), Panama, Thailand, UAE and Oman. The United States is also engaged in discussions on the Free Trade Area of the Americas (FTAA) and the Asia Pacific Economic Cooperation (APEC) free trade initiatives, each of which will be faced with questions concerning the adoption of reasonable broad accumulation arrangements.

1.5 Proposals for Extending Accumulation

The primary goal of this paper is to assist in the development of proposals by Jordan aimed at the extension of accumulation in meeting the requirements of the ROO. The economic rationale for such an approach by both Jordan and the United States and its other trading (FTA) partners was discussed above. Reasons for looking beyond the traditional focus of geographic regions in addressing these questions were also suggested. In this section a number of the possible key elements in such a proposal are presented and several considerations that may arise in negotiating these provisions are briefly considered.

1.5.1 Jordan's Goals

The ideal outcome from Jordan's perspective would be an amendment to the JUSFTA that would permit the accumulation of *qualifying* inputs sourced from other countries which have ratified FTAs with the United States and to treat these as originating within Jordan for the purpose of meeting ROO requirements. In other words, inputs imported from US FTA partners such as Israel, Singapore, Chile, Australia, Bahrain, Morocco and the CAFTA countries (and perhaps NAFTA) would qualify. Presumably as US FTA agreements are completed with other prospective countries/groups, including, *inter alia*, Southern Africa Customs Union (SACU), the Andean Countries, Panama, Thailand, UAE

and Oman. (At the same time the current limitation on use of US originating inputs (described above) would be removed.)

An important issue would be the requirements that would be imposed for these imported inputs to qualify for accumulation. From Jordan's perspective, the minimum limitations should be sought. However, there is little doubt that the United States would require that these inputs would be eligible for preferential treatment either under the ROO of the partner country or under Jordan's ROO, (i.e., a maximum of 35 percent non-originating materials).

A further consideration that would need to be addressed would be the administrative requirements to ensure that only qualifying inputs are utilized in this context. There is little point in proposing a system that would be extremely difficult and costly to implement efficiently and to monitor effectively.¹⁶ It is in Jordan's interests to demonstrate that these concerns can be adequately addressed. (There is a parallel paper being submitted that will look at these issues in some detail.)

It must also be anticipated that there would be some exceptions to expanding accumulation. Textiles and apparel, which have separate ROO under existing US FTAs would very likely be excluded – or at least approached in a somewhat different way. However, given Jordan's relatively favorable preferences available through the Qualifying Industrial Zones (QIZs), this would not necessarily be a bad thing from Jordan's perspective, (i.e., excluding textiles and apparel from expanded accumulation would preserve Jordan's preferences in this area.)

In seeking to develop this proposal with the USTR there are a number of issues that may arise that should be anticipated.

1.5.2 Limiting Expanded Accumulation Only to MEFTA (A Minimum Result)

In June 2004 the USTR evidently expressed a willingness to explore the potential for expanding accumulation to the prospective MEFTA. (It is understood that this did not preclude discussions on a more ambitious result, as proposed in this paper.)

It should be emphasized that the main economic benefits for Jordan from expanded accumulation provisions depend almost entirely upon the ability to increase access raw materials and intermediate goods at internationally competitive prices. (Note that Jordan may also be able to export inputs to other US FTA partner countries for use in manufacturing goods exported under the FTA.)

¹⁶ A useful indication of the nature of the likely concerns of the United States in this regard can be seen in the provisions under the Africa Growth and Opportunity Act (AGOA). For example, provisions under this program established record keeping requirements by firms as well as the legal rights available to access firms' records by US Customs.

From Jordan's perspective, expanding accumulation only to encompass MEFTA would appear to be the minimum result achievable, but one that would likely offer very limited economic benefits. The drawbacks of being confined to MEFTA include:

- MEFTA is uncertain and will at best take a number of years to fully implement;
- The generally internationally uncompetitive policy environments in a number of the prospective members and the limited likelihood for undertaking substantive reforms;
- The adverse terms of trade with respect to manufacturing among the oil-dominated countries (i.e., the incidence of "Dutch disease" effects for non-oil tradable sectors); and
- The broad similarities in the industrial sectors of these countries, suggesting that they would more likely be producing competing goods rather than potential producers of complementary inputs that would enhance Jordan's scope for expanding trade.

On balance, Jordan would have much more to gain through a substantially wider expansion of accumulation provisions to include all US FTA partners.

1.5.3 Closing the Loop? – Jordan Entering Into FTAs with US FTA Partners

A question has arisen whether among the countries with US FTAs it would be necessary or desirable for accumulation to be extended only to countries that also have bilateral FTAs amongst themselves. For example, currently Jordan, Singapore and the United States all have bilateral FTAs with each other. Is there a case to be made that an expansion of accumulation provisions be restricted only to these three countries? Or, is there any reason why these sorts of changes should not include, say for example, Australia, which has a FTA with the United States but not Jordan?

In principle there is no reason why there must be complete coverage of bilateral trade agreements for expanded accumulation amongst US FTA partners to make sense or be workable. In other words, in the example above, Jordan need not have an FTA with Australia if accumulation to meet ROO is permitted.

It would be possible to import inputs from Australia (in this example) to be used in the manufacture of goods to be exported under the JUSFTA to the United States. With no FTA with Australia, producers would be required to pay the duty on the imported inputs.¹⁷ The importers would also have to ensure that there is adequate documentation provided, such as a certificate of origin issued in Australia, to support the use of the good under the ROO so that a proper Jordanian certificate of origin could be issued.

Whether pursuing such an agreement makes sense depends upon several considerations. First, as the government undoubtedly fully appreciates, negotiating and implementing

¹⁷ Under the usual terms of US FTAs it would not be possible ordinarily for the producer to employ any duty offset or exemption schemes, such as duty drawback or bonded warehouse programs. Although highly unlikely, it would be worth examining whether accumulation of inputs could be accommodated under the qualifying industrial zone (QIZ) facilities.

comprehensive FTAs requires considerable time and human resources. Increasing numbers of FTAs also raise the prospect of overloading the trading system with multiple sets of tariff rates applicable and different documentation and administrative requirements. It is far from clear, *a priori*, whether the benefits from (for example) FTAs with Australia or Chile would exceed the costs. In the extreme case, if it were decided to enter into FTAs with all US FTA partners, this could conceivably include separate agreements with Chile, Australia, Bahrain, Morocco, Costa Rica, El Salvador, Guatemala, Honduras, the Dominican Republic, SACU, Ecuador, Colombia, Peru and Bolivia, Panama, Thailand, UAE and Oman. This list may well grow longer in the coming years.

A more important consideration in determining whether to pursue a series of inter-linked agreements with other US FTA partners depends on Jordan's broader strategy for trade reform. FTAs are only one tool available to policy makers in building a sound and open trade policy regime. Many would argue that FTAs are also *not* the best tool available – that unilateral and multilateral (WTO) approaches can be more effective avenues for broader liberalization. Given the potential costs in developing and implementing large numbers of FTAs, it is to be expected that as substantially expanded accumulation under the US FTA becomes available, there will be increased support by manufacturers in Jordan to reduce trade barriers unilaterally on a MFN basis. (This was the approach followed by ASEAN, with positive results.) Recognizing that this is a potential outcome of such an initiative would tend to strengthen the argument for acceptance by the USTR. Broader trade liberalization has been one of the core objectives underlying the US strategy in entering into FTAs with countries aiming for greater integration in the global economy.

1.5.4 A Possible Quid Pro Quo?

Trade negotiations inevitable entail an exchange of 'concessions', even if it is only for the sake of appearance, in order to maintain political support for such efforts. This is no less true for the USTR, where support in the US Congress is critical. It has to be anticipated that US FTA partners would need to make some sort of concession in exchange for an expanded accumulation provision.

Fortunately, there is an obvious concession that can be offered that would in fact be in the economic interests of the partner countries – some degree of acceleration of their tariff reduction schedules for imports from the United States. This could be done in several ways. One would be a straightforward acceptance of an across the board acceleration by a fixed percentage, say 25 or 50 percent. Another approach would borrow from a provision in the ASEAN AFTA. This would stipulate that goods for which tariffs on US imports are no greater than say 10 percent would be eligible for accumulation by the partner country in manufacturing for export to the US under the FTA. (To avoid excessive complexity, it may make sense to stipulate that all tariff lines in the respective HS chapter be below the agreed threshold level.)

The value for Jordan and other FTA partners of a far reaching accumulation provision also makes it easier to gain domestic support for accelerating the tariff reductions.

1.5.5 US Private Sector Support for Accumulation Provisions

There has been some support voiced by key US firms for expanded accumulation of inputs under FTAs. Two examples are mentioned below. No doubt additional statements could be provided, particularly by firms doing business in and with Jordan.

A group of major retailers, apparel and textile companies issued a statement on 3rd December 2003 stating, in part,

“The group supports the inclusion of NAFTA countries within the cumulation provisions of any CAFTA. It also supports strict enforcement of rules against illegal trans-shipment, including severe penalties for countries failing to implement effective enforcement of these provisions. ... Finally the group believes that CAFTA should include a mechanism for admitting to cumulation FTA partners who agree to the above enforcement provisions.” (*News Release, available on the internet.*)

Although the following statement by the American Chamber of Commerce in Europe is made in the context of the European Union trade agreements, it reflects the perspective of an influential group of US firms:

“Cumulation of origin. The purpose of cumulation is to grant groups of countries a more competitive edge or to achieve integration between various partners in a preferential regime (e.g., pan-European rules of origin). However, cumulation in practice is often difficult to use because the origin rule itself can be so construed that it cannot be satisfied because of the absence of production of a key component or material in the cumulation countries. Here the solution would be to introduce full cumulation as this would allow processing on non-originating materials in one country of the cumulation region to be taken into account together with subsequent processing in another country in the cumulation region. In such a scenario, an origin rule which for example requires double transformation (e.g., as for clothing items) could be satisfied.”

“It is also true that under the present regimes, the cumulation possibilities can lead to ineffective sourcing because the manufacturer could be obliged to source certain inputs from a partner country at a higher cost than he would pay in another country, or the use of such “preferred” components could in certain cases require the use of more expensive processing technology. This can ultimately lead to a higher price to be paid by the end consumer.” (*Press release by AMCHAM EU, 16 March 2004.*)

1.5.6 Expanded Accumulation – A Logical Step

An initiative to permit accumulation in meeting the ROO amongst all of the US FTA partners makes good economic sense for the United States as well as for Jordan. The USTR strategy of entering into FTAs with a number of small to medium sized countries offers the potential to have a substantial impact on the global trading environment. These are countries where economic growth and development are especially dependent upon expanded trade. For them, entering into an FTA with the United States represents an important building block towards sustaining and extending fundamental reforms throughout their economies. This is why the USTR has structured the agreements in the way that it has in recent years, including provisions on labor regulations, the environment, transparency in government procurement, etc.

There have been some in the US Congress that have criticized the USTR for entering into agreements with countries that are arguably insignificant in terms of their trade with the United States. Some of these critics have been urging a change in direction, to focus on the larger players in international trade. The counter argument (by the USTR) has been that these larger countries are generally far less inclined to embrace the reforms necessary to build a much more open global trading environment.

By agreeing to a far reaching accumulation provision amongst its FTA partners, the United States would be strengthening considerably the existing network that it has created in recent years. This would open the door to increased trade between these countries and encourage greater specialization in production that would increase productivity and accelerate economic growth and development. In so doing, it would give greater impetus towards multilateral efforts towards increased trade liberalization.

For Jordan, the US FTA represents a key pillar in the country's trade policy framework. Substantially expanded accumulation would go a long way towards overcoming the asymmetry in the size and diversity of the US and Jordanian economies. The economic value of preferential access to the US economy for a great many goods cannot be realized without such a provision.

Strengthening this pillar by broadening its application and accelerating its implementation will only serve to strengthen its trade and economic foundation domestically and within the region. As a small, developing country, increased trade is essential for increased growth and development.

Part Two – Defining Accumulation Rules

2.1 Introduction

This discussion of accumulation rules is in three sections. The first covers technical aspects of cumulation rules; the second section reviews origin regimes used under US

FTAs; and the third is a summary of conclusions and recommendations for Jordan's design of a cumulation rule.

The section on technical aspects of cumulation rules begins with definitions of the different kinds of accumulation rules found in agreements and the literature. This is followed by a review of the conditions typically imposed upon use of accumulation, as well as certain technical legal issues to be overcome to permit use of accumulation between Jordan and a third country or countries operating under US FTAs.

A condition of Jordan's use of diagonal accumulation – that is, accumulation with another FTA partner of the United States – may be that the countries involved use the same set of origin rules. Under the “pan-European” cumulation system employed by the EU with many of its FTA partners, all countries who wish to accumulate origin must use the same set of origin rules, both in their trade with the EU *and* with each other.

The US experience with accumulation among its FTA partners is much more limited than that of the EU, and it is not clear that the United States would require the same level of “identity” of origin rules as the EU does. Nevertheless, the second section of this paper reviews the origin rules used under the various US FTAs to determine what impact such an “identity” condition might have. The conclusion is that if identity is imposed, Jordan's options for cumulation partners under current US FTA agreements would be limited to Israel and, possibly, Bahrain and Morocco.

2.2 Accumulation Rules

An accumulation rule is essentially an exception to normal FTA origin rules. The JUSFTA origin rules, for example, generally require key manufacturing operations to take place in Jordan (where the product must be “substantially transformed”) and a significant portion of the value of the exported product to be attributable to Jordan production costs. Under accumulation rules, however, the Jordanian producer would be permitted to use third-country materials or processing in place of Jordanian inputs to qualify the finished product for duty-free treatment. Accumulation rules are “designed to integrate production among the countries who participate in different but overlapping or parallel free trade or preferential trade arrangements,”¹⁸ and to provide producers under these FTA agreements greater flexibility in decisions on sourcing intermediate materials or intermediate processing.

2.2.1 Definitions

Accumulation rules are widely used under EUs various free-trade arrangements, and they also have been a feature of US preferential trade arrangements for 30 years or more.¹⁹ Three types of cumulation appear in these FTA and preferential trade arrangements:

¹⁸ Patricia Augier and Michael Gasiorok, ‘The EU and the Southern Mediterranean: The Impact of Rules of Origin,’ (May 2002).

¹⁹ Accumulation has been used in the US Generalized System of Preferences and the Caribbean Basin initiatives, which are unilateral grants of duty-free treatment to products of developing countries.

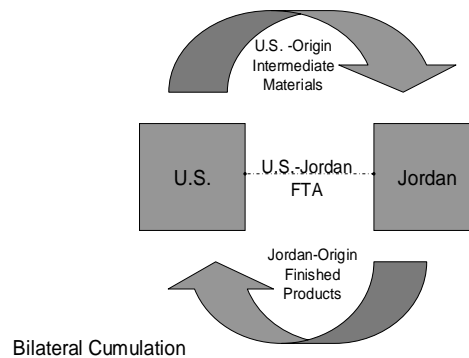
bilateral, diagonal, and full cumulation. The type of cumulation allowed will, of course, impact the degree of integration among partner countries and the flexibility that producers will have in their sourcing decisions.

Bilateral Accumulation

A bilateral accumulation rule allows a producer in one FTA country to consider as “originating” those parts, components or other inputs he obtains from a partner FTA country, provided the inputs themselves can be said to be “made in” the partner country under the relevant FTA origin rules.

To the extent accumulation is allowed under the JUSFTA, it is a limited kind of bilateral accumulation. That is, the Jordan FTA requires a

producer to show that the export is both a “product of” Jordan (wholly the growth, product or manufacture of Jordan or, if not, then substantially transformed there) *and* that 35 percent of the value of the finished product can be attributed to local content. The accumulation allowed is only for purposes of satisfying the 35 percent value-added requirement, not the “product of” requirement.



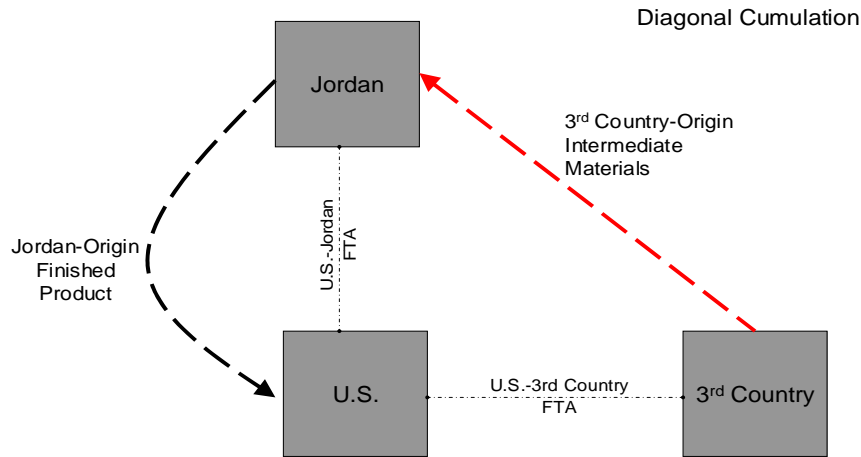
5. For purposes of determining the 35 percent domestic content requirement under this Agreement, the cost or value of materials which are used in the production of an article in one Party, and which are products of the other Party, may be counted in an amount up to 15 percent of the appraised value of the article. Such materials must in fact be products of the importing Party under the country of origin criteria set forth in this Agreement.

(JUSFTA, Annex 2.2, Article 5)

Moreover, as is clear from the text, the accumulation is further limited by the fact that a Jordanian producer can count the value of any inputs produced in the United States and incorporated in the exported product (provided those inputs are in fact “produced” in the United States, as defined by the rules of origin), only up to a limit of 15 percent of the customs value of finished exported product.

Diagonal Accumulation

Diagonal accumulation would allow a producer under a FTA with the United States to count as an “originating” input goods or materials produced in a third country which has a separate FTA with the United States.



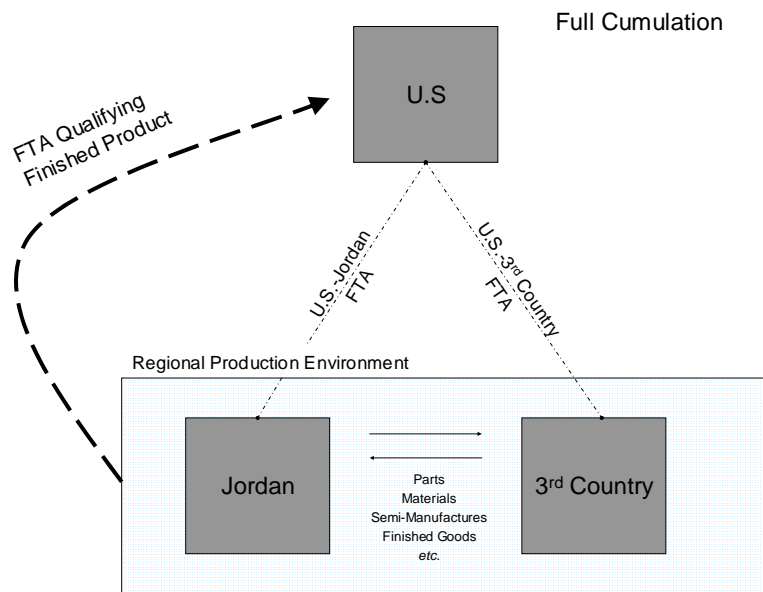
The so-called “Pan-European” cumulation system of origin is a diagonal accumulation rule, and allows certain countries who have entered into separate free trade agreements with the European Communities to source inputs from each other for purposes of qualifying preferential exports to the EU.

Diagonal accumulation is not common under US free trade agreements. In fact, the sole instance of a diagonal accumulation rule in a US FTA is the Central American Free Trade Agreement (CAFTA), which was concluded in December 2003, but has not yet been presented to the US Congress for approval. In that agreement, the US agreed to allow Central American Countries to accumulate origin with US NAFTA partners Canada and Mexico, but only with respect to wearing apparel products classified in Chapter 62 of the Harmonized System, and only for a limited annual volume of such imports.

Other conditions for diagonal cumulation, under both the US CAFTA and the Pan-European system, are discussed below.

Full Accumulation

Full accumulation allows a producer to take into account, for purposes of meeting particular FTA origin rules, the full production process that occurs in all FTA countries. In other words, the production process carried out anywhere in the FTA region can be aggregated to meet either “product of” or local value added rules.



For example, assume that Jordan is permitted to fully accumulate production with a third country for purposes of qualifying exports to the United States under the JUSFTA origin rules. Full accumulation would allow producers in Jordan to include the direct costs of processing undertaken by a producer in the third country with respect to an input – whether or not the processing done by the third country producer is sufficient under the FTA rules to confer origin by itself. Full cumulation would also allow the Jordanian producer to take into account the third-country processing for purposes of qualifying the finished good as a “product of” Jordan.

The operation of full cumulation rule is in contrast to bilateral or diagonal accumulation where the cost or value of inputs received from the third country can be accumulated – that is, taken into account to qualify the finished product under relevant origin rules – only if the input itself meets FTA origin rules.

Bilateral and diagonal cumulation require a discrete and significant stage of production – that which produces a material which is “originating” under the FTA origin rules – to be fixed completely in one of the partner countries. Full accumulation provides more flexibility for producers, as well as “deeper integration by allowing for more fragmentation of production processes among members of the regional group.”²⁰

The US free trade agreements with Morocco, Bahrain, NAFTA, among others, allows full cumulation between FTA partners – that is, on a bilateral basis. The JUSFTA does not provide for full cumulation between US and Jordanian producers. There is no instance in any US free trade agreement of full cumulation among three countries that are not parties to the same agreement.

²⁰ Paul Brenton, ‘Rules of Origin in Trade Agreements.’ World Bank Trade Note No. 4 (May 29, 2003).

2.2.2 Accumulation Conditions

Two main conditions are typically imposed on use of diagonal accumulation among countries who are parties to overlapping FTAs. These are:

1. the countries who participate in the accumulation arrangement must operate under the same set of origin rules; and
2. the customs administration located in the country where the tariff preference is granted must have ability to obtain and verify information from other countries involved.

In addition, a diagonal cumulation may require some technical adjustments to the rules of origin that would otherwise apply.

Cumulation Participants Use Same Origin Rules

The EU and the United States have taken very different approaches in their respective FTAs concerning the requirement of a common origin rule among cumulation participants. The EU rule is quite restrictive, as it requires *all* countries involved in the cumulation to apply *identical* origin rules. The United States appears to accept a more liberal approach, and would seemingly require only that the origin of an intermediate material from the third-country supplier be determined using the same set of origin rules that is used to determine the tariff preference of the finished product.

Pan-European Diagonal Cumulation

The “pan-European” diagonal cumulation system is based on the common set of origin rules for preferential trade under the network of FTAs in place between the European Community (EC), the European Free Trade Agreement (EFTA) countries, Bulgaria, Romania, and Turkey. Under the system, a producer in any one of the 30 countries within this “pan-European zone” can consider as “originating” any materials that is produced in any of the other 29 countries.²¹

A basic condition for participation in the pan-European system is identity of origin rules among *all* partners. That is, diagonal cumulation is permitted only if:

- Each country must apply identical origin rules with each of the other two countries concerned. It is not sufficient that Country A alone applies identical origin rules with the other two, they too must apply the same origin rules between themselves, and
- A country can only operate cumulation with those countries with which it has an origin protocol providing for such cumulation and containing the identical origin rules.²²

²¹ The pan-European cumulation model, which was originally created in 1997 on the basis of the European Economic Area agreement, has been applied by the EU in agreements with other trade partners including countries operating under the Euro-Mediterranean Association agreements.

²² ‘A User’s Handbook to the Rules of Preferential Origin Used in Trade between the European Community and Other European Countries’ (not dated).

The common set of origin rules used in the pan-European system is defined in Protocol No. 4 to the European Economic Area agreement.²³

U.S. FTA Accumulation Rules

As stated, there has been to date only one instance of diagonal cumulation in US FTAs. This is the limited cumulation right given for wearing apparel articles in the CAFTA.²⁴ That provision allows the CAFTA countries (Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua) to source materials from the US's NAFTA partners, Canada and Mexico. The agreement, however, specifies certain conditions for cumulation, as follows:

- Materials sourced from Mexico or Canada must comply with CAFTA origin rules
- Mexico or Canada (as the case may be) and the CAFTA country must amend the free trade agreement between themselves to provide for “reciprocal application of this [cumulation] rule”, that is, they must allow in their agreements inputs sourced from the US to be likewise treated as originating under the same conditions.

The CAFTA rule thus provides a more flexible standard for diagonal cumulation than that which is required by the pan-European system. In particular, it appears that the United States does not require that all three countries involved agree to an identical set of preferential origin rules. The CAFTA rule requires only that, with respect to exports to the United States, under the CAFTA, materials sourced by a CAFTA country producer from Mexico or Canada will be considered originating if the sourced materials meet CAFTA origin rules, regardless of what other rules might apply with respect to preferential trade directly between Mexico or Canada and the CAFTA country.²⁵

The CAFTA diagonal cumulation rule is an important precedent for Jordan's proposed diagonal cumulation rule. As discussed below in the second section of this paper, Jordan's options for cumulation partner countries would be limited if a condition of accumulation is that all countries involved must apply identical (or even similar) origin regimes. The CAFTA precedent suggests that this is not necessary, and thus opens the possibility of cumulation sources to all US FTA partner countries.

²³ O.J. L137 (June 5, 2003), p. 48.

²⁴ Use of diagonal cumulation, other than in agreements involving Europe, is rare. A 2002 World Trade Organization (WTO) survey indicates *only one* instance of diagonal cumulation between non-European countries. That was under the Canada-Israel FTA, which allows US inputs to be used. WTO Committee on Regional Trade Agreements WT/REG/W/45 (April 5, 2002).

²⁵ Canada is negotiating a free trade agreement with four Central American countries –El Salvador, Nicaragua, Honduras, and Guatemala - a process which began in November 2001. The negotiating text of this proposed “CA4” agreement is not publicly available. Canada has a free trade agreement with Costa Rica, the fifth Central American country of the US-CAFTA agreement. The Canada-Costa Rica FTA rules of origin for wearing apparel under Chapter 62 are nearly identical to those of the US-CAFTA chapter 62 rules. International Trade Canada, Regional and Bilateral Initiatives, Canada-Central America Four Free Trade Agreement Negotiations, www.dfait-maeci.gc.ca/tna-nac/ca4-en.asp.

Customs Verification

To ensure traders' compliance with rules of origin and other conditions for duty-free treatment, customs administrations will require legal authority to obtain information and records located in the exporting country. This is a particularly important provision for US and Jordanian customs, given the procedure by which an origin claims are allowed under the JUSFTA. That is, under the FTA, customs authorities are generally required to accept the importer's origin claims based on the importer's self-certification (and not, for example, certification by a governmental authority in the FTA partner country), subject to Customs ability to perform post-clearance risk-based audit of importers and their suppliers.

The JUSFTA provides that customs authorities shall assist each other to obtain the necessary information related to transactions under the agreement in order to verify trader compliance.²⁶ More elaborate enforcement cooperation provisions are included in other US FTA agreements, such as the NAFTA, which authorizes the customs administration in the importing country to conduct verifications – including on-site verification visits – of producers in the exporting country to ensure compliance with origin rules.

In a diagonal cumulation, the United States will not necessarily have an agreement with the third country to obtain information about suppliers who provide intermediate materials to Jordan producers. For example, if cumulation is allowed between Jordanian and Bahrain producers, the US customs will not have authority under either the Jordan or Bahrain FTAs to audit the books and records of a Bahrain producer for compliance with the *JUSFTA* origin rules, although they might have authority under the Bahrain FTA to verify origin with US-Bahrain FTA rules.

Accordingly, in the CAFTA agreement, a condition imposed by the United States on Central American countries ability to cumulate origin with either Mexico or Canada is that:

“[the United States has entered into an agreement with [Mexico and Canada] to provide for ...verifications substantially similar to those set forth in Article 3.24 [of the CAFTA] (Customs Cooperation) including document review and on-site visits, for materials produced in the territory of [Mexico or Canada] used to produce a good claimed to be originating under this Rule.”

CAFTA, Appendix 4.1-B, note 1(a)(iii).

As in the case of the CAFTA, the United States will likely require, as a condition of diagonal cumulation under the JUSFTA, the execution of separate agreements between the United States and the third country which will require that third country to cooperate with US Customs requests for information necessary to verify compliance with JUSFTA rules.

²⁶JUSFTA, Annex 2.2, Article 11.

2.2.3 Other Technical Conditions

In proposing a diagonal cumulation rule under the JUSFTA, account must be taken of a number of administrative and legal technical requirements of the current agreement that must be modified. These are as follows:

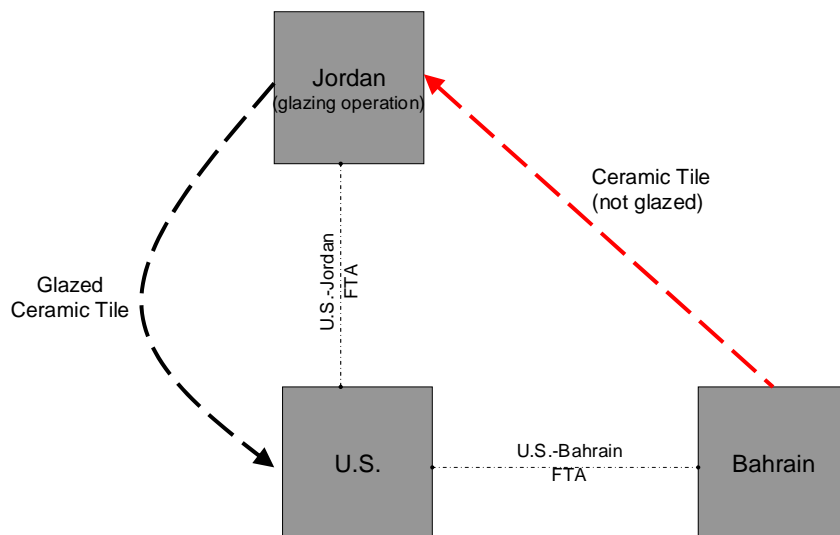
Allow Minimal or Tail-End Processing

To accommodate diagonal cumulation under the current JUSFTA, the current bilateral cumulation provision might simply be extended to allow inputs to third countries, in addition to the United States. However, as indicated in the preceding section of this paper, the current bilateral accumulation rule is limited as it will allow US-producer's intermediate materials to be used in a Jordan manufacturing operation:

- (1) *only* for purposes of complying with the 35 percent local content requirement (that is, it cannot be used to meet the “product of” requirement), and
- (2) *only* up to 15 percent of the customs value of the exported product.

The difficulty with using this approach in diagonal cumulation can be illustrated by the following example:

Assume that the JUSFTA is amended to allow Jordan to accumulate origin with Bahrain. A Jordanian ceramics producer imports unglazed ceramic tiles that were fully manufactured in Bahrain. In Jordan, the Jordanian manufacturer glazes the tiles and exports them to the United States.



Generally, under US rules, glazing ceramics would not be considered a substantial transformation, and therefore not sufficient to confer Jordanian-origin on the product

exported to the United States. This means that even though the product might be 100 percent from the FTA region - that is, a result of combined production of Jordan and Bahrain - it would nonetheless not be considered a “product of” Jordan. It would thus fail the JUSFTA origin rules as they are now written, and would not qualify for the duty preference when exported to the United States.

This anomaly is due to the narrowness of the bilateral cumulation rule in JUSFTA: it only allows inputs to contribute to the 35 percent local content requirement, and not to the “product of” requirement.

Therefore, in designing the diagonal cumulation rule, it would be important to ensure that the current bilateral cumulation language is not used as the basis for the statement of the rule or, if used, it is amended so that preference would not be lost because of this technicality.

The appropriate legal model for a diagonal cumulation rule that avoids this technicality is the US-Bahrain or US-Morocco bilateral cumulation rule. The text from those agreements is set out in Annex 2, which might be used as model for Jordan.

Which of Two Preferential Rates Applies?

Apart from the legal technicality just described, and assuming that a diagonal cumulation rule will be structured on the basis of the bilateral cumulation rule that appears in the US-Bahrain or Morocco agreements, as opposed to the bilateral cumulation rule in the current JUSFTA, there is a second technicality that must be overcome related to minimal or tail end processing undertaken in Jordan.

The United States trade agreements with its different FTA partners – such as Jordan, Morocco and Bahrain - apply different preferential tariff rates to exactly the same goods. This is due to the fact that, although all three countries have free trade agreements with the United States, the US tariff reductions under their respective agreements with the United States are reduced over different periods of time, and from different starting points.

Table 2. US Rates: Glazed and Unglazed Ceramic Tile (HTS 6908.10.10/HTS 6907.10.00)

	Jordan	Morocco	Bahrain*	MFN Rate**
2004	2.8%	9.7%	10%	10%
2005	Free	8.5%	9.9%	10%
2006		7.3%	8.8%	10%
2007		6.1%	7.7%	10%
2008		4.8%	6.6%	10%
2009		3.6%	5.5%	10%
2010		2.4%	4.4%	10%
2011		1.2%	3.3%	10%
2012		Free	2.2%	10%
2013			1.1%	10%
2014			Free	10%

*Assumed that Bahrain FTA takes effect in 2005.

**Assumed no further reduction in WTO multilateral negotiations.

Under a diagonal cumulation rule, Bahrain or Morocco inputs would be treated as if they were Jordanian origin for purposes of qualifying under the JUSFTA. This means, for example, if a Jordan producer imports unglazed ceramic tile from Bahrain, glazes the tile in Jordan, and exports the finished product it to the United States, the finished product would be considered a “product of” Jordan and meet the 35 percent local value requirements of the Jordan FTA. It would qualify for the preferential rate applicable to Jordan products (2.8 percent in 2004; free in 2005).

Obviously, this creates possibilities for trade deflection that origin rules are intended to stop. Absent a rule to the contrary, it would allow a Bahrain producer to take advantage of the better tariff rate applicable to Jordan imports simply by passing the product through Jordan for minimal processing prior to export to the United States.

To prevent this possibility of trade deflection, one of two technical solutions might be proposed. Under both solutions, the determination of the applicable preferential tariff rate will be based on the country of origin of the exported product.²⁷ One solution - which appears more advantageous to Jordan - is that used under the pan-European origin protocols. The other solution is suggested by US NAFTA origin rules.

Under the pan-European cumulation system, the country of origin of an originating product is that country where it last underwent working or processing as long as the processing done is more than minimal. That is, the working or processing need not amount to an origin-conferring operation, but it must be more than simple processing defined in the protocol such as packaging, washing, repackaging *etc.* If only minimal processing is done, then that last country may yet be considered the country of origin of the product if the value that is added in that last country is greater than the value of any component originating materials provided by cumulation partners. If not, then the origin is that country which provided the originating material that accounts for the highest value.

The EU solution is biased to favor the last country where any work is done on the product (usually, the export country) as the country of origin, and therefore the tariff preference would be that which applies to its products.

It would seem more likely that the United States would favor a solution it has used in the past with other trade partners. In particular, this is the solution that is used under the NAFTA, which presents a similar technical difficulty (US tariff rates on products of

²⁷ Unfortunately, and as confusing as it may be, rules for determining country of origin are NOT the same as rules for determining qualification of a product for a tariff preference, although the terminology used is the same. This is the difference between non-preference rules of origin and preferential rules. The rules in Annex 2.2 of the U.S.-Jordan FTA are preferential rules. The purpose of these rules is to determine whether a product qualifies for duty free treatment; they are not intended to provide a determination of the country of origin of the product for other purposes, although in many or most cases, the result is the same. Where the result is not the same, and for all non-preferential trade purposes – such as country of origin marking, administration of quotas, *etc.* – non-preference rules are applied to determine which of two countries can be considered the country of origin.

Canada and Mexico are reduced under different schedules). In this case, the United States and other NAFTA parties rely upon the so-called “NAFTA Marking Rules” to determine country of origin of the product, and therefore the applicable preferential tariff rate. The NAFTA Marking rules are simply the rules that determine origin for all non-preferential trade purposes in North America. As discussed in Annex 2, the NAFTA marking rules are based on the same substantial transformation definition of origin (the “product of” criteria that appears in the JUSFTA), but expressed in terms of tariff shifts. Depending upon the solution chosen, there will be different results. For example, in the case of unglazed ceramic tiles made in Bahrain and glazed in Jordan, the country of origin (and therefore the preferential tariff rate) would be Jordan under the EU rule and Bahrain under the US rule.

Modification of Direct Transport Rule

Most US FTAs, including the JUSFTA, include a direct transport rule. Under this rule, qualifying products must be shipped directly from Jordan to the United States (or vice versa) with minor exceptions to allow transshipment storage or minor operations under customs control in third countries. If the good is otherwise further processed in a third country en route to the United States, even to a minor extent, then preferential treatment is lost.

Unless modified, the JUSFTA’s direct shipment rule would thus preclude the minimal or tail end processing in the cumulation partner. An Amendment is required to ensure that shipment of the goods through the cumulation partner does not cause loss of preferential status.

Remove Limit on Contribution of Partner Inputs

Certain accumulation rules restrict the purpose and extent to which inputs from the accumulation partner can be used. As described above, under the US-Jordan FTA, the bilateral cumulation provision is very narrowly drawn. It allows partner inputs to be used

- (1) only for purposes of complying with the 35 percent local content requirement (that is, it cannot be used to meet the “product of” requirement), and
- (2) it limits the contribution from the partner to 15 percent of the customs value of the exported product.

If such a limitation is carried over to any diagonal cumulation allowed under the JUSFTA, it clearly would significantly limit the value of cumulation. It would mean that the key component or processing operation would be required to be sourced or carried out in Jordan (this is the “product of” limitation), and the significant costs of manufacturing or production would be located in Jordan.

This suggests that Jordan should propose amendment of its agreement with the United States to bring it in line with the bilateral cumulation provisions of the Morocco or Bahrain FTA, which do not contain these two limitations on bilateral cumulation.

2.3 Origin Regimes under US Free Trade Agreements

The purpose of the following discussion is to identify the US FTA countries who could be cumulation partners under the JUSFTA *if* identity of origin rules is a condition of diagonal cumulation.

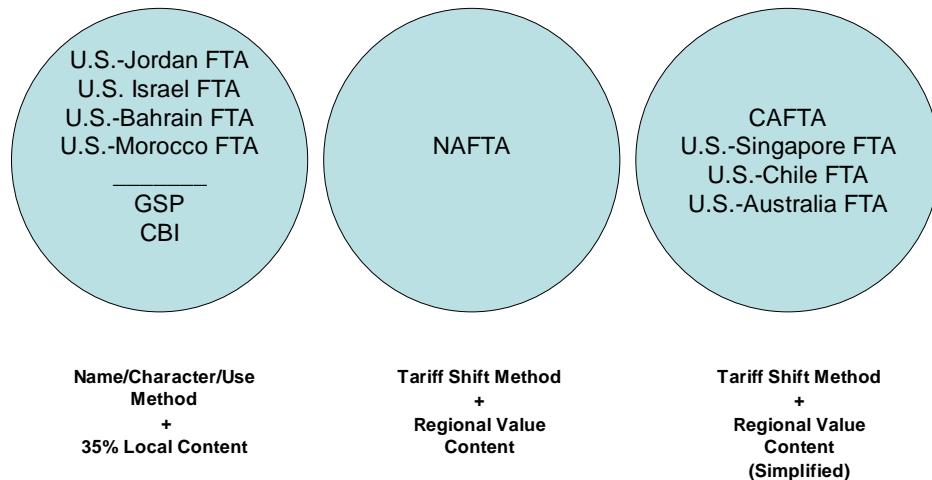
As indicated in the prior section, the pan-European cumulation system requires all participants to apply the same set of origin rules, both in trade with the EU and with each other. Among other purposes, such a condition does simplify administration of rules within an FTA region for both traders and customs authorities. Thus, while the CAFTA diagonal cumulation rule suggests that the United States could apply a more liberal approach, a harmonized rule applied across all US-FTA agreements would have advantages.

The question examined here is whether and with which countries under current US free trade agreements Jordan might harmonize its origin rules. The answer, as explained below, is very few.

In contrast to the harmonized approach of the EU origin protocols, the rules of origin regimes that appear in the various US free trade agreements are highly varied and, at a product level, there are significant differences in the processes which are considered to confer origin from one agreement to another. However, at a higher level, it is possible to categorize the different US FTA origin regimes at a higher level in one of three broad groups which – coincidentally or not - correspond to geographical groupings:

- (1) Middle-East FTA rules, which is the category under which the JUSFTA falls and are considered the least complex,
- (2) NAFTA rules, which are the most complex, and
- (3) Other Western Hemisphere/Pacific FTA rules, which are closely related, but considered simpler to apply than the NAFTA rules (a “NAFTA-lite”).

What these different categories of rules suggests is that if a common set of origin rules becomes a condition of diagonal cumulation under the JUSFTA, then Jordan’s cumulation partners would be limited to those countries who apply the rules of the first category: Israel, Bahrain and Morocco.



2.3.1 US-Middle East FTA Rules

The rule of origin that appears in the JUSFTA has been used by the United States in its preferential trade agreements with developing countries since at least 1974, most notably under the Generalized System of Preferences and Caribbean Basin Initiative programs. This longstanding US origin rule has two components, both of which must be satisfied for a good to qualify for the preferential treatment:

- A qualitative element. Specifically, origin is defined as that country in which the goods were last substantially transformed into a new and different article, with a distinct name, character or use. The US Customs uses this qualitative definition for determining origin in non-preferential trade, such as administration of the country-of-origin marking law or application of most-favored nation (MFN) tariffs.
- A quantitative element. It must be shown that at least 35 percent of the customs value of the good can be attributed to cost or value of local materials and/or direct costs of local processing.

In four US FTAs --with Israel, Jordan, Bahrain, and Morocco-- this traditional rule of origin is used to determine whether products will qualify for the respective FTA preferences.

However, the four agreements apply three distinct origin regimes for purposes of textile and apparel trade preferences. Moreover, as described below, in three of these agreements, the United States with its respective FTA partner has defined a small number of product-specific exceptions to the general rule of origin. These exceptions potentially

complicate harmonization of origin rules among these agreements, and therefore may present some difficulty for diagonal accumulation.

Product-Specific Exceptions (Other Than Textile/Apparel)

Generally, the product-specific origin rules defined in the US-Bahrain and US-Morocco FTAs apply a “tariff-shift” definition of origin in place of the general rule. Most of these product-specific exceptions relate to processed fruits and vegetables and other agricultural commodities.

The following table lists the products for which the relevant agreement defines a specific rule of origin.

Table 3. Product Specific Rules – U.S. Middle East Countries Free Trade Agreements

Israel	Jordan ²⁸	Bahrain	Morocco
(None)	Textiles and Apparel Articles	Textiles and Apparel Articles	Textiles and Apparel Articles
		Dairy and other products containing more than 10% milk solids (Chapter 4)	Live plants and cut flowers (Chapter 6)
		Sugars and molasses (Chapter 17)	Vegetables, frozen, preserved, or dried (Chapter 7)
		Cocoa powder with sugar/other sweeteners (Chapter 18)	Fruits and nuts, frozen, preserved, or dried (Chapter 8)
		Citrus juices (Chapter 20)	Roasted coffee, green tea, dried/crushed/ ground pepper, saffron (Chapter 9)
		Fortified, concentrated fruit/vegetable juices (Chapter 21)	Locust beans (Chapter 12)
			Locus bean mucilage and thickeners (Chapter 13)
			Processed vegetable, fruits, nuts, including citrus juices (Chapter 20)
			Fortified, concentrated fruit and vegetable juices (Chapter 21)
			Wines (Chapter 22)
			Self-adhesive plastics (<i>i.e.</i> , tape) (Chapter 39)
			Flat-rolled iron/non-alloy steel products (Chapter 72)
			Ignition wiring sets for vehicles; winding wire and coaxial cable; other insulated electrical conductors (Chapter 85)
			Automotive and truck bodies and other parts; trailers and parts (Chapter 87)

²⁸ The rules listed in this table are positive rules, or definition of criteria which confer origin. The JUSFTA does contain one product-specific rule which defines processes that do not confer origin. This is the rule that citrus juices can not be considered the product of a country if processed from imported fruit.

In general, tariff shift definitions of origin are designed to ensure that manufacture of the key component of the finished goods – that which is thought to give the “essential character” – or a significant stage of manufacturing is undertaken within the FTA area. For example, in the case of the Bahrain and Morocco product-specific rules that relate to food and drink, the finished product qualifies only if the fruit or vegetable used in production is grown in the FTA country.

It is important to note that under the Bahrain and Morocco agreements, if a product-specific rule is provided, then that rule replaces the general FTA rule of origin. That is, it replaces *both* the qualitative (name, character and use test) *and* the quantitative tests of origin (the 35 percent local content requirement).

Because the usual 35 percent local content rule does not apply, the Moroccan and Bahrain product-specific origin rules may be considered *less* restrictive than the JUSFTA rules for the same products.²⁹ At a minimum, the simpler tariff-shift rule reduces administrative costs - unlike Jordanian producers, Moroccan and Bahraini manufacturers of these products are not required to calculate production costs or keep cost records for verification.

On the other hand, analysis of these product-specific rules is required to determine whether their overall effect is to require more significant or a deeper level of production in the FTA country than would be required under Jordan’s FTA rules.

Annex 1 compares the Morocco and Bahrain product-specific rules to Jordan’s rules for the same products. The result suggests that, with exceptions, the effect of the application of these rules will be the same or perhaps less restrictive than the JUSFTA origin rules.

For example, as indicated in the extract from Annex 2 in the table below, the effect of the product specific rule for citrus juices, cut flowers, and vegetables is the same as under the US-Jordan origin rules. This means that Jordan producers of these products will be required to both undertake the same production processes as Morocco and Bahrain producers but, unlike those producers, Jordanian producers will be further required to demonstrate that 35 percent of the value of the finished product can be attributed to Jordanian production.

²⁹ While technically this may be true, practically it may or may not have much impact. That is, if a product qualifies under a product-specific rule – which requires both the major input in the production (fruit or vegetable), as well as the production itself to take place within Morocco or Bahrain – then it would seem more likely than not that it would also meet the 35 percent local content rule.

Table 4. Extract from Annex 2. US-Middle East FTA Product Specific Rules

		Morocco	Bahrain	Jordan
Citrus Juices (2009.11-2009.39)	Rule	A change to subheading 2009.11 through 2009.39 from any other chapter except from heading 0805	A change to subheading 2009.11 through 2009.39 from any other chapter, except from heading 0805.	Change in name, character or use
	Effect	<i>Requires fruit from which juice is made to be originating</i>	<i>Requires fruit from which juice is made to be originating</i>	<i>Requires fruit from which juice is made to be originating</i>
Cut Flowers (0603)	Rule	A change to heading 0602 through 0603 from any other chapter.	Change in name, character or use	Change in name, character or use
	Effect	<i>Requires flowers from which bouquets or similar articles are made to be grown in country (seeds/bulbs can be non-originating)</i>	<i>Requires flowers from which bouquets or similar articles are made to be grown in country (seeds/bulbs can be non-originating)</i>	<i>Requires flowers from which bouquets or similar articles are made to be grown in country (seeds/bulbs can be non-originating)</i>
Vegetables, frozen, dried or preserved (0710 to 0713)	Rule	A change to heading 0710 through 0713 from any other chapter.	Change in name, character or use	Change in name, character or use
	Effect	<i>Requires vegetables to be grown in country (seeds/bulbs can be non-originating)</i>	<i>Requires vegetables to be grown in country (seeds/bulbs can be non-originating)</i>	<i>Requires vegetables to be grown in country (seeds/bulbs can be non-originating)</i>
Preparations of fruits and nuts (2008)	Rule	A change to heading 2008 from any other chapter except from chapter 8	Change in name, character or use	Change in name, character or use
	Effect	<i>Requires product to be made from originating fruits or nuts</i>	<i>Allows non-originating fruits or nuts to be used, other than fruit, nut or vegetable preparations that are prepared or preserved merely by freezing, by packing in water, brine or natural juices, or by roasting, in which case the fruit or nuts must be originating</i>	<i>Allows non-originating fruits or nuts to be used, other than fruit, nut or vegetable preparations that are prepared or preserved merely by freezing, by packing in water, brine or natural juices, or by roasting, in which case the fruit or nuts must be originating</i>

In developing the proposal for cumulation with Bahrain or Morocco, Jordan may wish to take this discrepancy in origin rules into account. One approach that Jordan may wish to consider is to propose a “safe harbor” rule for Jordanian producers. That is, generally, intermediate materials sourced from Bahrain or Morocco must comply with the rules of origin defined in JUSFTA to be considered originating. This is consistent with the cumulation condition provided in the US CAFTA. However, Jordan may wish to further propose as an alternative or a “safe harbor” that if the Jordanian producer meets any

product-specific rule that may be provided under the Bahrain or Moroccan agreements, he will also qualify for duty-free treatment. At a minimum, this will relieve Jordanian producers from administrative costs of compliance with the 35 percent local content requirements, at least with respect to those products.

Textile and Apparel Origin Rules

There is a significant difference among the origin rules used for purposes of textile and apparel preferences in the various US FTAs, even between the Jordan FTA and the otherwise similar Bahrain, Morocco, and Israel agreements. In US FTAs, three very distinct origin systems are used, as depicted in the following table.

Table 5. Textile Origin Regimes in U.S. Free Trade Agreements

	Substantial Transformation Rules	§334 Rules (General Non-Preferential Trade)	“NAFTA” Rules
Israel	x		
Jordan		x	
Bahrain			x
Morocco			x

Substantial Transformation. This origin regime, as applied to textiles, is used only in the Israel FTA. In general, under this regime, origin is determined on the basis of the name. Character and use test of origin applicable to all products, and generally the result of application of the test matched the 334 rules. An important exception is for apparel, where origin is country where the fabric is cut to size and shape.

§334 Rules. The JUSFTA incorporates the same rules for textiles and apparel preferences that the United States uses for administration of its non-preferential trade.³⁰ Generally, these rules are distinguished by their emphasis of assembly over other operations (such as cutting to shape), and define origin of textile and clothing on the following principles:

- Yarn/Thread/Twine – origin is that country where the constituent staple fibers are spun or the continuous filament is extruded.
- Fabric – origin is that country where the individual yarns, fibers or filaments are combined (by a process of weaving, knitting, or otherwise) to form the imported fabric.
- Clothing – origin is that country where the article is wholly assembled from its component pieces. If assembled in more than one country, then that country where the most important assembly took place; otherwise, the country where the last important assembly took place.

³⁰ These origin rules were mandated by section 334 of the 1994 Uruguay Round Agreements Act, as part of legislation implementing into US law the WTO agreement on textiles and clothing.

NAFTA Rules. The remaining FTAs employ a very different approach to origin of textile and apparel articles than that of the Israel or Jordan agreements. Generally, these FTAs use origin rules for textiles that are identical to, or are closely modeled on, the origin rules used for textile and apparel in the NAFTA.

Given that these are rules that are used for qualifying products for tariff preferences, these rules employ a stricter rule of origin for textile/apparel than appears in the §334 Rules used in the US-Jordan FTA, and require a deeper level of processing to take place in the FTA region. Generally, the rules are as follows:

- Yarn/Thread/Twine – the yarn or thread must be spun in the FTA region AND the fiber used to spin the yarn or thread must be formed in the FTA region – either grown in the FTA region (in the case of natural fibers such as wool or cotton) or extruded in region (in the case of man-made fibers).
- Fabric – fabric must be produced from yarn spun in FTA region. This “yarn forward” rule means that fabric qualifies only if it is formed in the region AND the yarn used in production is spun in the region.
- Clothing – the rule for clothing is generally the same “yarn forward” rule that applies to fabric. Apparel qualifies if it is cut to shape, assembled in the FTA region from yarn produced in the region.

In other words, in the JUSFTA, the textile or apparel article must be shown to originate in Jordan or the United States, as the case may be, in accordance with these rules, and must meet the 35 percent local content requirement.

In sum, therefore, although the US-Middle East FTAs use the same general definition of origin, there is in fact not strict harmony of rules among the four countries because of these product-specific exceptions written in their respective agreements. If a harmonized rule of origin is a condition for diagonal cumulation among these four countries, this disparity in origin rules may prevent cumulation, at least for those products.

2.3.2 Western Hemisphere/Pacific FTA Rules

The origin rules used under US FTAs outside the Middle East are based on methods fundamentally different than those found in the JUSFTA. These agreements generally apply a simplified version of the origin rules used in the NAFTA. Under these rules, origin is defined in terms of tariff-shifts (rather than the name, character or use test of the Jordan FTA) *and* a regional value content requirement for certain products (particularly machinery and electrical products).

In further and perhaps greater contrast to the JUSFTA and sister agreements in the Middle East, the regional value in US-Western Hemisphere/Pacific FTAs is calculated on a different basis than the Jordan FTA 35 percent local content. Generally, cost of production is not used. Moreover, the amount of regional content required is dependent on the method of calculation used and the particular product concerned.

As explained in the technical note to Annex 2, it is possible to translate JUSFTA name, character and use test to the language of tariff-shifts. We can then compare at the rule level, using the common language of tariff shifts, the rules of origin for particular products to demonstrate the difference between Jordan FTA rules and those of the Western Hemisphere/Pacific FTAs.

Table 6. Comparison of Tariff Preference Rules in US FTAs for Selected Products

Product	Jordan (translated)	Australia	Singapore	Chile	CAFTA
Ceramic tiles and sanitary ware (Chapter 69)	Chapter Change + 35% local content	Chapter Change	Chapter Change	Chapter Change	Chapter Change
Chairs and Furniture (Chapter 94)	Subheading Change + 35% local content	Heading Change or Subheading Change + regional value content (35% if “build up” method used; 45% if build down method used)	Subheading Change	Heading Change or Subheading Change + regional value content (35% if “build up” method used; 45% if build down method used)	Heading Change
Gold Necklaces (Chapter 71)	Subheading Change + 35% local content	Heading Change	Heading Change	Heading Change	Heading Change
Citrus Juices (HTS 2009.11-2009.39)	Chapter Change (other than from heading 0805) + 35% local content	Chapter Change (other than from heading 0805)	Chapter Change (other than from heading 0805)	Chapter Change (other than from heading 0805)	Chapter Change (other than from heading 0805)
Preparations of Fruits and Nuts (2008)	Chapter Change (except preparations that have been prepared or preserved merely by freezing, by packing in water, brine or natural juices, or by roasting, shall be treated as a good of the country in which the fresh good was produced) + 35% local content	Chapter Change (except if prepared or preserved by freezing, by packing in water, brine or natural juices, or by roasting, then the fresh fruit or nuts must be grown in an FTA country).	Chapter Change (except if prepared or preserved by freezing, by packing in water, brine or natural juices, or by roasting, then the fresh fruit or nuts must be grown in an FTA country).	Chapter Change (except if prepared or preserved by freezing, by packing in water, brine or natural juices, or by roasting, then the fresh fruit or nuts must be grown in an FTA country).	Chapter Change (except if prepared or preserved by freezing, by packing in water, brine or natural juices, or by roasting, then the fresh fruit or nuts must be grown in an FTA country).

This table shows that the definition of origin rules in these Western Hemisphere/Pacific FTAs is clearly different than those of the JUSFTA. Moreover, this difference in definition likely implies a difference in degree of processing required to confer origin under the respective agreements. As a general rule, in the language of tariff shifts, the greater the tariff shift, the greater the extent of processing that will be required to confer origin. A chapter change implies a significant amount of processing; a heading change less, and a subheading change the least.

Thus, a comparison of Jordan's rules with those of the other FTAs suggests that for some products, the degree of processing required to confer origin under the JUSFTA may be greater than that required under these other agreements (*i.e.*, for any product where Jordan rules require 35 percent value, and the other agreements have no regional value content requirements); in other cases, it may be less (for example, Jordan's rule for chairs and furniture versus the CAFTA countries' rule for the same products).

In sum, *if* identity of origin rules among cumulation partners is a condition of diagonal cumulation, these Pacific and Western Hemisphere FTA countries will likely be precluded as candidates. There is inconsistency in the definition of origin in these countries' respective FTAs, which in turn suggests that there will be differences in degree of processing required to confer origin.

2.3.3 Integrated Sourcing Initiative

The US-Singapore FTA suggests an alternative to cumulation, which would meet Jordan's objectives, at least for certain sectors. Under the Singapore FTA "Integrated Sourcing Initiative" (ISI), certain information technology (IT) products and components and medical devices imported by the United States from Singapore (and vice versa) are deemed to be originating without reference to any preferential rules of origin. The products covered under the ITS are listed in Annex 3. These products are already duty-free under US and Singapore normal MFN rates, as a result of agreement reached in the WTO following the Uruguay Round,³¹ so the initiative provides no duty advantage from export of the component by itself. However, the duty advantage lies when one country manufactures a finished product using listed components imported from the other. When the finished product is returned to the country from which the components were sourced, the producer can count as an "originating" material any of these components on the ISI list, both for purposes of qualifying under tariff-shift rules and regional value content rules that may be applicable.

If the ISI could be extended to Jordan, the question of harmonization or similarity of underlying rules of origin would be irrelevant. Jordan producers could use the full value of an ISI component sourced from Singapore or the United States to qualify the finished products under JUSFTA rules, without regard to the country of origin of the imported component. All that would be required is that Jordan imports the electronic component from Singapore or the United States.

³¹ This was the 1996 Information Technology Agreement.

2.4 Recommendations

The purpose of this paper is to (1) identify and propose solutions to technical issues in design of an accumulation rule that Jordan wishes to propose to extend the JUSFTA, and (2) identify those inconsistencies among the origin regimes used under the various FTA agreements of the United States that potentially preclude Jordan's accumulation of origin with other US FTA partners.

With regard to the technical aspects of the accumulation rule, the following conclusions can be drawn:

- The US experience with diagonal cumulation among FTA partners is rare, but there is at least one precedent and legal model on which Jordan may rely. This is the diagonal cumulation rule of the US-Central America FTA ("CAFTA") that applies to articles of clothing classified under for HS Chapter 62.
- The advantage of the CAFTA model is that, by its terms, it does not require strict identity or harmony of origin rules among all accumulation participants. That is, the origin rules used by the United States, Jordan and the third country do not have to be identical. If identity of origin rules were a condition of accumulation – as it is under the pan-European cumulation system – Jordan would be precluded from cumulating origin with countries other than Israel and, possibly, Bahrain and Morocco.
- A diagonal cumulation rule modeled on the basis of the CAFTA rule will require that any intermediate product that Jordan sources from a third-country (Bahrain, Singapore, Australia, *etc.*) must comply with the *JUSFTA origin rules* in order to be considered originating. Other conditions that will likely be imposed under the CAFTA model are
 - The U.S. must enter into an agreement with the third country to allow US customs verification of origin claims; that is, access to information, books and records in the third country and, possibly, the right to conduct on-site audits.
 - The third country must have an FTA with Jordan, and that FTA must be amended to provide "reciprocal treatment"; that is, it must allow U.S. inputs to be used to accumulate origin with respect to trade between Jordan and that third country under the same conditions.
- The cumulation rule that Jordan proposes should not merely extend the current bilateral cumulation rule in the JUSFTA to the third country. That bilateral cumulation rule is narrow, as it allows US inputs to be used only for purposes of meeting the 35 percent local content test, and then only up to a limit of 15 percent of the customs value of the exported product. A diagonal cumulation based on these conditions would not accomplish Jordan's objective of allowing third-country materials to qualify Jordan's exports for the tariff preference.
 - Although not within the scope of this project, Jordan should consider investigating a proposal to the United States to convert the current narrow bilateral cumulation rule under the JUSFTA to a full cumulation rule.

Both the US-Morocco FTA and the US-Bahrain FTA – and, presumably, future Middle East FTAs – allow for *full* cumulation of US inputs to be used by producers in those countries to qualify their exports for tariff preferences. In this respect, Jordan would appear to be disadvantaged vis-à-vis the other countries, which otherwise operate under nearly identical FTAs with the United States.

- A number of other technical adjustments will be required to the JUSFTA in order to accommodate diagonal cumulation. These are:
 - Where an export to the United States is the result of combined production of Jordan and its cumulation partner (Bahrain, Australia, or any other US FTA country), there will be a question which US preferential duty rate applies: the rate applicable under Jordan's FTA schedule, or the rate applicable to the third country under its tariff reduction schedule with the United States. This problem arises because of difference in timing of elimination of tariffs under the different agreements. The rule that would seem to best suit Jordan is the rule used in EU agreements: the applicable rate is that which applies to the country where the exported product was last worked or processed. The competing rule is that used by the United States in the NAFTA, which determines the rate using non-preferential rules of origin.
 - The direct transport rule in the Jordan FTA must be modified to allow tail-end processing in Jordan of the third-country material.
 - As indicated in a previous point, the cumulation rule should not be subject to the 15 percent limit that now applies under the JUSFTA to US inputs.

The second section of this paper reviewed the origin regimes used under the various US free trade agreements. The purpose of this review was to determine whether, and to what extent, inconsistencies in origin rules among US FTAs might limit Jordan's choice of cumulation partner countries.

The assumption underlying this review is that harmony of origin rules among partner countries will be a condition of accumulation. However, as indicated above, *if* the CAFTA model can be used as the basis for diagonal cumulation, *then* any inconsistency in origin regimes should be irrelevant. That is, regardless of the origin rules agreed between the United States and Australia under that FTA, for example, the CAFTA model suggests that if Australian inputs will be used for purposes of allowing Jordan producers qualify exports under the JUSFTA, then those inputs must comply with Jordan FTA rules only.

Nevertheless, assuming that consistency in origin rules among US FTA trade participants is a condition of accumulation, the review of origin regimes suggests the following conclusions:

- Jordan's cumulation partners would likely be restricted to Bahrain, Morocco, and Israel, each of whom have FTAs with the United States that contain origin rules

similar to those of Jordan's FTA, other than for textiles and apparel. Differences in origin rules for textiles could preclude cumulation in that sector, if a common origin regime is required.

- Bahrain and Morocco's FTAs with the United States include a small number of product-specific rules of origin which in application result in origin determinations different than those of the Jordan FTA rules for the same products. However, a comparison of these rules indicates that they are less restrictive than those applied under the Jordan FTA. Accordingly, Jordan may wish to propose adoption of these product-specific rules under its agreement with the United States if required to enable cumulation, at least as a "safe-harbor".
- Although Jordan and Singapore FTAs apply significantly different rules of origin regimes, this should not prevent cumulation, at least with respect to IT products and medical devices. The innovative Integrated Sourcing Initiative of the Singapore FTA suggests a an opportunity for Jordan to use Singapore components to meet JUSFTA rules, without any need to conform or harmonize the different rules of origin used by the two countries under their respective FTAs with the United States.

Annex 1. Accumulation Models - Legal Text

The following are examples of legal text, taken from U.S. free trade agreements, of full accumulation and diagonal cumulation. This might be considered as models for Jordanian proposals for accumulation.

Full Cumulation:

“Each Party shall provide that direct costs of processing operations performed in one or both of the Parties as well as the value of materials produced in the territory of one or both of the Parties may be counted without limitation toward satisfying the 35 percent value-content requirement specified in Article ____ [the Article specifying country of origin criteria].

Each Party shall provide that an originating good or a material produced in the territory of one or both of the Parties, incorporated into a good in the territory of the other Party, shall be considered to originate in the other Party.

Each Party shall provide that a good grown, produced, or manufactured in the territory of one or both of the Parties by one or more producers shall be an originating good, provided that it satisfies the country of origin criteria and all other applicable requirements in this Chapter.”

(from U.S.-Morocco Free Trade Agreement, Article 5.4)

Diagonal Cumulation:

“For purposes of determining whether a good of chapter 62 of the Harmonized System is originating, materials used in the production of such a good that are produced in Canada or Mexico and that would be originating under this Agreement if produced in the territory of a Party shall be considered as having been produced in the territory of a Party.”

(from U.S.-Central American Free Trade Agreement, Appendix 4.1-B)

Diagonal Cumulation – Minimal Processing

1. ... products shall be considered as originating in the European Economic Area (“EEA”) if such products are obtained there, incorporating materials originating in Bulgaria, Switzerland (including Liechtenstein), the Czech Republic, Estonia, Hungary, Iceland, Lithuania, Latvia, Norway, Poland, Romania, Slovenia, the Slovak Republic, Turkey or in the Community in accordance with the provisions of the Protocol on rules of origin annexed to the Agreements between the Contracting Parties and each of these countries, provided that the working or processing carried out in the EEA goes beyond the operations referred to in Article 6 [this is the list of minimal processes which do not confer origin]. It shall not be necessary that such materials have undergone sufficient working or processing.
2. Where the working or processing carried out in the EEA does not go beyond the operations referred to in Article 6, the product obtained shall be considered as originating in the EEA only where the value added there is

greater than the value of the materials used originating in any one of the countries referred to in paragraph 1. If this is not so, the product obtained shall be considered as originating in the country which accounts for the highest value of originating materials used in the manufacture in the EEA.

(Pan-European Cumulation System, Protocol 4)

Annex 2. Analysis of U.S.-Middle East FTA Product Specific Rules

The rules of origin of the U.S.-Jordan FTA use the “name, character and use” criteria to define country of origin of imported goods. Under those criteria, a good is said to originate in that country where, as a result of manufacture or other processing, the good was last substantially transformed into a new and different article with a new name, character and use. This is the same definition that the United States Customs has used for decades to determine origin for non-preferential trade purposes.

In comparing U.S.-Jordan FTA’s origin rules with those in other U.S. FTAs, the first difficulty faced is that many of those other FTAs use a completely different method of defining origin. Under those agreements, origin is defined as that country where a specified change in the tariff classification of the goods took place.

There is a means, however, to translate the U.S.-Jordan FTA rules into tariff shift rules. This can be done using, as a rule of thumb or guide, the tariff shift definition of origin that was established by US Customs for purposes of North American trade. Specifically, these rules were designed to provide US Customs with a means to determine which tariff preference applies to goods eligible for NAFTA: the preferential tariff applicable to goods of Mexican origin or that applicable to goods of Canadian origin. These rules are also used for administration of non-preference rules in North American trade, such as determining the correct country of origin for purposes of the U.S. country of origin marking law. For that reason, these rules are sometimes known as the “NAFTA Marking Rules.” They are codified in part 102 of the U.S. Customs Regulations (and for that reason, they are sometimes also called the “part 102 rules”).

For purposes of this paper, however, the important point is that the NAFTA Marking Rules were intended, when they were written, to reflect the application and results of the U.S. “name, character and use” definition of origin as applied to specific products (with some exceptions). That is, whether the “name, character and use” test or the NAFTA Marking Rule is used to determine the country of origin of a particular product, the result should be the same.

The NAFTA Marking Rules are thought to be a superior mode of defining origin because they provide an objective standard for origin, and are therefore less prone to subjective interpretations by individual customs officers using the “name, character and use” test. For that reason, under both the U.S.-Bahrain and U.S.-Morocco FTAs, the parties agreed in a side letter to be guided by the NAFTA Marking Rules in making origin determinations under the “name, character and use” test:

“For purposes of determining whether a good is a “new or different article of commerce that has been grown, produced, or manufactured” for the purposes of Article 4.1(b) of the Agreement, each Party should be guided by the specific rules in tariff classification set forth in section 102.20 of the United States Customs Regulations (19 CFR 102.20) (the “Specific Rules”), as may be amended.

The United States will afford the Government of Bahrain the opportunity to comment on any proposed revisions to the Specific Rules. Furthermore, officials of the Office of the United States Trade Representative and other appropriate U.S.

Government agencies will meet with officials of the Ministry of Finance and National Economy and representatives from other competent authorities of the Government of Bahrain to discuss any concerns of the Government of Bahrain regarding any proposed revisions.”

Accordingly, using the NAFTA Marking Rules, it is possible to translate the U.S.-Jordan FTA rules of origin for specific products into the language of tariff shifts, and thus compare U.S.-Jordan FTA Rules with those of other U.S. FTAs. The following table compares Jordan FTA (translated) rules to the product specific rules of the Bahrain and Morocco FTAs.

Table A2.1 Comparison of Jordanian and Other Middle East US FTA Partner Product Specific Rules

Product (HS Code)	Jordan (Translated to Tariff Shift)	Bahrain	Morocco
Live Plants (0602)	A change to heading 0601 through 0602 from any other heading, including another heading within that group.		A change to heading 0602 through 0603 from any other chapter.
<i>Explanation</i>	<i>Requires plant to be grown in country (allows use of non-originating seed, bulbs, tubers etc.)</i>		<i>Requires plant to be grown in country (allows use of non-originating seed, bulbs, tubers etc.)</i>
Cut flowers (0603)	A change to heading 0603 ...from any other heading ...except from heading 0602.		A change to heading 0602 through 0603 from any other chapter.
<i>Explanation</i>	<i>Requires flowers from which bouquets or similar articles are made to be grown in country (seeds/bulbs can be non-originating)</i>		<i>Requires flowers from which bouquets or similar articles are made to be grown in country (seeds/bulbs can be non-originating)</i>
Frozen Vegetables, (0710)	A change to heading 0710 from any other chapter.		A change to heading 0710 through 0713 from any other chapter.
<i>Explanation</i>	<i>Requires vegetables to be grown in country (but allows use of non-originating seed, bulbs, tubers etc.)</i>		<i>Requires vegetables to be grown in country (but allows use of non-originating seed, bulbs, tubers etc.)</i>
Vegetables, provisionally preserved (0711)	A change to heading 0711 from any other chapter.		A change to heading 0710 through 0713 from any other chapter
<i>Explanation</i>	<i>Requires vegetables to be grown in country (but allows use of non-originating seed, bulbs, tubers etc.)</i>		<i>Requires vegetables to be grown in country (but allows use of non-originating seed, bulbs, tubers etc.)</i>
Vegetables, dried (0712)	A change to heading 0712 from any other chapter; or a change to powdered vegetables of heading 0712 from any other product of Chapter 7, if put up for retail sale		A change to heading 0710 through 0713 from any other chapter
<i>Explanation</i>	<i>Generally requires vegetables to be grown in country, but allows non-originating vegetables to be used to make powdered vegetables packaged for retail sale.</i>		<i>Requires vegetables to be grown in country (but allows use of non-originating seed, bulbs, tubers etc.)</i>
Dried leguminous vegetables 0713	A change to heading 0713 through 0714 from any other chapter.		A change to heading 0710 through 0713 from any other chapter
<i>Explanation</i>	<i>Requires vegetables to be grown in country (but allows use of non-originating seed, bulbs, tubers etc.)</i>		<i>Requires vegetables to be grown in country (but allows use of non-originating seed, bulbs, tubers etc.)</i>
Fruits and nuts, frozen, preserved, or dried (0811 to 0814)	A change to heading 0811 through 0814 from any other chapter.		A change to heading 0811 through 0814 from any other chapter.
<i>Explanation</i>	<i>Requires frozen/dried/preserved fruits and nuts to be grown in country (but allows use of non-originating seed, bulbs,</i>		<i>Requires frozen/dried/preserved fruits and nuts to be grown in country (but allows use of non-</i>

Product (HS Code)	Jordan (Translated to Tariff Shift)	Bahrain	Morocco
	<i>tubers etc.)</i>		<i>originating seed, bulbs, tubers etc.)</i>
Roasted Coffee (0901.21-0901.22)	A change to subheading 0901.21 through 0901.22 from any subheading outside that group.		A change to subheading 0901.21 through 0901.22 from any other chapter.
<i>Explanation</i>	<i>Allows roasted coffee to be produced from non-originating coffee (roasting green coffee beans is a substantial transformation)</i>		<i>Requires roasted coffee to be produced from coffee grown in country (roasting green coffee beans is NOT a substantial transformation)</i>
Green Tea (0902.10)	A change to heading 0902 through 0903 from any other chapter.		A change to subheading 0902.10 from any other subheading.
<i>Explanation</i>	<i>Requires tea to be grown in country</i>		<i>Packaging of tea in immediate containers of less than 3 kg (i.e., in individual tea-bags) is a substantial transformation; bulk green tea can be non-originating.</i>
Capsicum or Pimenta Peppers, dried, crushed or ground (0904.20)	A change to heading 0904 through 0910 from any other chapter; or A change to crushed, ground, or powdered products of heading 0904 through 0910 from within Chapter 9, if put up for retail sale.		A change to subheading 0904.20 from any other chapter except from chapter 7.
<i>Explanation</i>	<i>Crushing/grinding spices is a substantial transformation; non-originating pepper can be used.</i>		<i>Crushing/grinding spices is NOT a substantial transformation; pepper must be grown in country</i>
Saffron (0910.20)	A change to heading 0904 through 0910 from any other chapter; or A change to crushed, ground, or powdered products of heading 0904 through 0910 from within Chapter 9, if put up for retail sale.		A change to subheading 0910.20 from any other chapter.
<i>Explanation</i>	<i>Crushing/grinding spices is a substantial transformation; non-originating saffron can be used.</i>		<i>Crushing/grinding spices is NOT a substantial transformation; saffron must be grown in country.</i>
Locust beans (1212.10)	A change to heading 1209 through 1214 from any other chapter.		A change to a good of subheading 1212.10 from any other subheading or from carob or seed of carob of subheading 1212.10.
<i>Explanation</i>	<i>Requires product to be grown in country</i>		
Locus bean mucilage and thickeners (1302.32)	A change to heading 1301 through 1302 from any other chapter.		A change to goods of subheading 1302.32 from any other subheading or from mucilage, not modified, of subheading 1302.32.
<i>Explanation</i>	<i>Extraction of mucilage/thickener from plant is a substantial transformation; product must be derived from locus bean plant in country (plant can be non-originating).</i>		<i>Derivation of product from mucilage is a substantial transformation; neither plant nor mucilage needs to be originating.</i>

Product (HS Code)	Jordan (Translated to Tariff Shift)	Bahrain	Morocco
Sugars and molasses (1701-1703)	A change to heading 1701 through 1703 from any other chapter.	A change to heading 17.01 through 17.03 from any other chapter.	
<i>Explanation</i>	<i>Extraction of raw sugar from sugar cane or beet is a substantial transformation (cane or beet can be non-originating).</i>	<i>Extraction of raw sugar from sugar cane or beet is a substantial transformation (cane or beet can be non-originating).</i>	
Cocoa powder with sugar/other sweeteners (1806.10)	A change to subheading 1806.10 from any other heading, except from heading 1805 or from Chapter 17; or A change to subheading 1806.10 from Chapter 17, provided that the good contains less than 65 percent by dry weight of sugar.	A change to sweetened cocoa powder of subheading 1806.10 from any other heading, provided that such sweetened cocoa powder does not contain non-originating sugar of chapter 17.	
<i>Explanation</i>	<i>Requires product to contain only originating sugar (i.e., sugar that was extracted from cane or beet in country) or, if not, then product must contain less than 65% sugar by dry weight.</i>	<i>Requires product to contain only originating sugar (i.e., sugar that was extracted from cane or beet in country)</i>	
Vegetables, fruits, and nuts, prepared or preserved; jams, jellies, marmalades, fruit or nut pureé and fruit or nut pastes, (2001 to 2007)	A change to heading 2001 through 2007 from any other chapter (except fruit, nut and vegetable preparations that have been prepared or preserved merely by freezing, by packing (including canning) in water, brine or natural juices, or by roasting, either dry or in oil (including processing incidental to freezing, packing, or roasting), shall be treated as a good of the country in which the fresh good was produced.)		2001 A change to heading 2001 from any other chapter except from chapter 7 or 8. 2002 A change to heading 2002 from any other heading except from chapter 7. 2003 A change to heading 2003 from any other chapter except from chapter 7. 2004 A change to heading 2004 from any other chapter except from chapter 7. 2005 A change to heading 2005 from any other chapter except from chapter 7. 2006 A change to heading 2006 from any other chapter except from chapter 7 or 8. 2007 A change to heading 2007 from any other chapter except from chapter 7 or 8
<i>Explanation</i>	<i>Processing of fruit, nuts or vegetable must be done in country (but fruit, nut or vegetable may be non-originating)</i>		<i>Requires fresh fruit, nut or vegetables which are processed to be grown in country</i>
Preparations of fruits or nut preparations (2008)	A change to subheading 2008.11 from any other chapter, provided that the change is not the result of mere blanching of peanuts (except preparations that have been prepared or preserved merely by freezing, by packing in water, brine or natural juices, or by roasting, shall be treated as a good of the country in which the fresh good was produced)		A change to heading 2008 from any other chapter except from chapter 8.

Product (HS Code)	Jordan (Translated to Tariff Shift)	Bahrain	Morocco
<i>Explanation</i>	<i>Allows non-originating fruits or nuts to be used, other than in exception processes described in the rule.</i>		<i>Requires product to be made from originating fruits or nuts</i>
Citrus Juices (2009.11 to 2009.39)	A change to subheading 2009.11 through 2009.30 from any other chapter (except from heading 0805) ³²	A change to subheading 2009.11 through 2009.39 from any other chapter, except from heading 0805.	A change to subheading 2009.11 through 2009.39 from any other chapter except from heading 0805
<i>Explanation</i>	<i>Requires juice to be made from fruit grown in country</i>	<i>Requires juice to be made from fruit grown in country</i>	<i>Requires juice to be made from fruit grown in country</i>
Pineapple, Tomato, Apple and other Juices of a Single Fruit; Vegetable Juices (2009.41 to 2009.80)	A change to subheading 2009.40 through 2009.80 from any other chapter		A change to subheading 2009.41 through 2009.80 from any other chapter or from concentrated juice of grapes, apples, pears, bananas, guavas, mangoes, or carrots of heading 2009.
<i>Explanation</i>	<i>Allows juice to be produced from non-originating fruits or vegetables.</i>		<i>Requires juice to be made from fruit or vegetable grown in country or from concentrated juices under the exception described.</i>
Mixtures of Juices (2009.90)	A change to subheading 2009.90 from any other chapter; or a change to subheading 2009.90 from any other subheading, provided that a single juice ingredient of foreign origin, or juice ingredients from a single foreign country, constitute in single strength form no more than 60 percent by volume of the good.		A change to subheading 2009.90 from any other chapter; or a change to subheading 2009.90 from any other subheading within Chapter 20, whether or not there is also a change from any other chapter, provided that a single juice ingredient, or juice ingredients from a single non-Party, constitute in single strength form no more than 60 percent by volume of the good.
<i>Explanation</i>	<i>Allows juice mixtures to be produced from non-originating fruits or vegetables or from non-originating juices of a single fruit or vegetable under the conditions stated.</i>		<i>Allows juice mixtures to be produced from non-originating fruits or vegetables or from non-originating juices of a single fruit or vegetable under the conditions stated.</i>
Fortified, concentrated fruit and vegetable juices (2106.90)	A change to subheading 2106.90 from heading 2009 or subheading 2202.90, provided that a single juice ingredient of foreign origin, or juice ingredients from a single foreign country, constitute in single strength form no more than 60 percent by volume of the good;	A change to concentrated juice of any single fruit or vegetable fortified with vitamins or minerals of subheading 2106.90 from any other chapter, except from heading 0805, from subheading 2009.11	A change to concentrated juice of any single fruit or vegetable fortified with vitamins or minerals of subheading 2106.90 from any other chapter or from juice of grapes, apples, pears, bananas, guavas, mangoes and carrots of heading 2009, except from heading 0805,

³² The NAFTA Marking Rule for HS 2009.11 to 2009.39 requires only “a change to subheading 2009.11 to 2009.30.” This would allow use of non-originating fruit. However, the U.S.-Jordan FTA includes the exception noted here – “except from heading 0805” – which thus requires citrus fruit (which is classified in Heading 0805) to be from Jordan or the U.S.

Product (HS Code)	Jordan (Translated to Tariff Shift)	Bahrain	Morocco
		through 2009.39, or from subheading 2202.90.	subheading 2009.11 through 2009.39, or subheading 2002.90.
<i>Explanation</i>	<i>Allows juice to be produced from non-originating fruits or vegetables or from non-originating unfortified juices and/or flavored/sugared waters under the conditions stated.</i>	<i>Requires fortified citrus juices to be made from fruit grown in country; does not allow use of non-originating unfortified citrus juices or flavored/sugared waters</i>	<i>Requires fortified citrus juices to be made from fruit grown in country; does not allow use of non-originating unfortified citrus juices or flavored/sugared waters</i>
Wines (2204.10 to 2204.30)	A change to subheading 2204.10 through 2204.29 from any other subheading outside that group. A change to subheading 2204.30 from any other heading.		A change to subheading 2204.10 through 2204.30 from any other chapter.
<i>Explanation</i>	<i>Requires wine to be produced in country (grapes can be non-originating)</i>		<i>Requires wine to be produced in country (grapes can be non-originating)</i>
Self-adhesive plastics (i.e., tape) (3919.10 to 3919.90)	A change to subheading 3919.10 through 3919.90 from any other subheading outside that group.		A change to subheading 3919.10 through 3919.90 from any other subheading outside that group.
<i>Explanation</i>	<i>Disallows cutting adhesive plastic strip to width</i>		<i>Disallows cutting adhesive plastic strip to width</i>
Flat-rolled iron/non-alloy steel products (7209 7212)	A change to heading 7209 from any other heading, except from heading 7208 or 7211. A change to heading 7210 from any other heading, except from heading 7208 through 7212. A change to heading 7211 from any other heading, except from heading 7208 through 7209. A change to heading 7212 from any other heading, except from heading 7208 through 7211.		A change to heading 7209 from any other heading A change to heading 7210 from any other heading. A change to heading 7211 from any other heading. A change to heading 7212 from any other heading.
<i>Explanation</i>	<i>Cutting to width, cladding, plating and/or coating does NOT constitute a substantial transformation</i>		<i>Cutting to width, cladding, plating, and/or coating DOES constitute a substantial transformation</i>
Ignition wiring sets for vehicles; winding wire and coaxial cable; other insulated electrical conductors (8544.30)	A change to subheading 8544.11 through 8544.70 from any other subheading, including another subheading within that group, except when resulting from a simple assembly. (Simple assembly is defined as ‘the fitting together of five or fewer parts all of which are foreign (excluding fasteners such as screws, bolts, etc.) by bolting, gluing, soldering, sewing or by other means without more than minor processing.’’)		A change to an ignition wiring set or other wiring set of 8544.30, of a kind used in vehicles, from any other subheading, or from a good within that subheading, provided that assembly of the wiring set involves at least each of the following operations: (a) assembly of at least 10 separate parts; (b) cutting of wire into different lengths to create wire sub-assemblies; (c) stripping of the sheathing of wire; (d) inserting connectors to the ends of wire sub-assemblies; (e) attaching wire sub-assemblies to cable; and

Product (HS Code)	Jordan (Translated to Tariff Shift)	Bahrain	Morocco
			(f) 100 percent testing of wiring sets and other quality control operations and packaging and labeling of finished product. A change to subheadings 8544.11-8544.20 and subheadings 8544.41-8544.70 from any other subheading, including a subheading within that group, provided that the value of materials produced and direct costs of processing operations performed in the territory of one or both of the Parties is not less than 35 percent of the appraised value of the good at the time it is entered into the territory of a Party.
<i>Explanation</i>	<i>Requires more than simple assembly in country (assembly of more than 5 parts)</i>		<i>Process defined in the rule must take place in country</i>
Automotive and truck bodies (8707)	A change to heading 8707 from any other heading, except from subheading 8708.29 when that change is pursuant to General Rule of Interpretation 2(a).		A change to heading 8707 from any other heading.
<i>Explanation</i>	<i>Requires car body to be assembled in country (other than from imported "knock-down" kits)</i>		<i>Requires car body to be assembled in country</i>
Automotive radiators, clutches and parts, steering wheels/columns/boxes; miscellaneous automotive parts (8708)	A change to subheading 8708.91 from any other subheading, except from subheading 8708.99 when that change is pursuant to General Rule of Interpretation 2(a). A change to subheading 8708.93 from any other subheading. A change to subheading 8708.94 from any other subheading, except from subheading 8708.99 when that change is pursuant to General Rule of Interpretation 2(a). A change to subheading 8708.99 from any other subheading.		8708.91 A change to subheading 8708.91 from any other subheading. 8708.93 A change to subheading 8708.93 from any other subheading. 8708.94 A change to subheading 8708.94 from any other subheading. 8708.99 A change to subheading 8708.99 from any other subheading.
<i>Explanation</i>	<i>Requires parts to be assembled in country (other than from imported "knock-down" kits)</i>		<i>Requires parts to be assembled in country (other than from imported "knock-down" kits)</i>
Trailers (other than	A change to subheading 8716.10 through 8716.80 from any		A change to subheading 8716.31/39/40 from

Product (HS Code)	Jordan (Translated to Tariff Shift)	Bahrain	Morocco
campers or for housing) and parts (8716)	other heading or from subheading 8716.90 except when that change is pursuant to General Rule of Interpretation 2(a). A change to subheading 8716.90 from any other heading, except from subheading 8709.90 or 8431.49.		any other subheading. A change to subheading 8716.90 from any other subheading
<i>Explanation</i>	<i>Requires trailer to be assembled in country (other than from non-originating trailer bodies, or from parts of non-originating lifting/handling/loading machinery)</i>		<i>Requires trailer to be assembled in country</i>

Annex 3. Integrated Sourcing Initiative Product List

Description of products	Tariff item US HS 2002	Tariff item Singapore HS 2003
Chemical elements doped for use in electronics, in form of discs, wafers or similar forms; chemical compounds doped for use in electronics	3818	3818
Word processing machines	8469.11	8469.11
Calculating machines and pocket-size data recording, reproducing and displaying machines with calculating functions; accounting machines, postage-franking machines, ticket-issuing machines and similar machines, incorporating a calculating device; cash registers;	8470	8470
Automatic data processing machines and units thereof, magnetic or optical readers, machines for transcribing data onto data media in coded form and machines for processing such data, not elsewhere specified or included:	8471	8471
Automatic teller machines	8472.90.10	8472.90.10
Parts and accessories of the machines of heading No 8470 of the electronic calculating machines of subheading 8470 10, 8470 21 or 8470 29	8473.21	8473.21
Parts and accessories of the machines of heading No 8470 other than electronic calculating machines of subheading 8470 10, 8470 21 and 8470 29	8473.29	8473.29
Parts and accessories of the machines of heading No 8471	8473.30	8473.30
Parts and accessories equally suitable for use with machines of two or more of the heading Nos. 8469 to 8472	8473.50	8473.50
Static converters for automatic data processing machines and units thereof, and telecommunication apparatus	8504.40.60 8504.40.70 8504.40.85	8504.40.11
Other inductors for power supplies for automatic data processing machines and units thereof, and telecommunication apparatus	8504.50.40	8504.50.11. 8504.50.21
Electrical apparatus for line telephony or line telegraphy, including line telephone sets with cordless handsets and telecommunication apparatus for carrier-current line systems or for digital line systems; videophones; parts thereof:	8517	8517
Microphones having a frequency range of 300 Hz to 3.4 KHz with a diameter of not exceeding 10 mm and a height not exceeding 3 mm, for telecommunication use	8518.10.40	8518.10.11
Line telephone handsets	8518.30.10	8518.30.40
Loudspeakers, without housing, having a frequency range of 300 Hz to 3.4 KHz with a diameter of not exceeding 50 mm, for telecommunication use	8518.29.40	8518.29.20
Telephone answering machines	8520.20	8520.20
Magnetic tapes of a width not exceeding 4 mm	8523.11	8523.11
Magnetic tapes of a width exceeding 4 mm but not exceeding 6.5 mm	8523.12	8523.12
Magnetic tapes of a width exceeding 6.5 mm	8523.13	8523.13
Magnetic discs	8523.20	8523.20
Other	8523.90	8523.90
Disc for laser reading systems for reproducing phenomena other than sound or image.	8524.31	8524.31

Description of products	Tariff item US HS 2002	Tariff item Singapore HS 2003
Electrical machines with translation or dictionary functions	8543.89.92	8543.89.20
Other electric conductors, for a voltage not exceeding 80V, fitted with connectors, of a kind used for telecommunications	8544.41.40	8544.41.11
Other electric conductors, for a voltage not exceeding 80V, not fitted with connectors, of a kind used for telecommunication	8544.49.40	8544.49.91 8544.49.92 8544.49.93 8544.49.94 8544.49.95 8544.49.99
Other electric conductors, for a voltage exceeding 80V but not exceeding 1000V, fitted with connectors, of a kind used for telecommunications	8544.51.70	8544.51.91 8544.51.92 8544.51.93 8544.51.94 8544.51.99
Optical fiber cables	8544.70.00	8544.70
Electrostatic photocopying apparatus, operating by reproducing the original image directly onto the copy (direct process).	9009.11.00	9009.11
Other photocopying apparatus, incorporating an optical system	9009.21.00	9009.21
Parts and accessories	9009.91 9009.92 9009.93 9009.99	9009.90
Instruments and apparatus for measuring or checking the flow, level, or other variables of liquids or gases (for example, flow meters, level gauges, manometers, heat meters), excluding instruments and apparatus of heading 9014, 9015, 9028 or 9032; parts and accessories thereof:	9026	9026
Chromatographs and electrophoresis instruments	9027.20	9027.20
Spectrometers, spectrophotometers and spectrographs using optical radiations (UV, visible, IR)	9027.30	9027.30
Other instruments and apparatus using optical radiations (UV, visible, IR) of heading 9027	9027.50	9027.50
Other instruments and apparatus of heading no 9027, (other than those of heading No. 9027.10)	9027.80	9027.80
Parts and accessories of products of heading 9027, other than for gas or smoke analysis apparatus and micrometers.	9027.90.45 9027.90.54 9027.90.64 9027.90.84	9027.90.10
Instruments and apparatus for measuring and checking, specially designed for telecommunications (for example, cross-talk meters, gain measuring instruments, distortion factor meters, psophometers)	9030.40	9030.40
Quartz reactor tubes and holders designed for insertion into diffusion and oxidation furnaces for production of semiconductor wafers	7017.10.30 7020.00.30	7017.10.10 7017.10.90
Chemical vapor deposition apparatus for semiconductor production	8479.89.84 8419.89.	8419.89.11 8419.89.12 8419.89.13 8419.89.14 8419.89.19 8419.89.20

Description of products	Tariff item US HS 2002	Tariff item Singapore HS 2003
Parts of chemical vapor deposition apparatus for semiconductor production	8479.90.94 8419.90.	8419.90.11 8419.90.12 8419.90.13 8419.90.14 8419.90.15 8419.90.19 8419.90.21 8419.90.22 8419.90.23 8419.90.24 8419.90.29
Spin dryers for semiconductor wafer processing	8421.19.30	8421.19.20
Parts of spin dryers for semiconductor wafer processing	8421.91.60	8421.91.30
Deflash machines for cleaning and removing contaminants from the metal leads of semiconductor packages prior to the electroplating process	8424.30.90 8424.89.50 8465.99.40 8479.89.84	8424.89.30
Spraying appliances for etching, stripping or cleaning semiconductor wafers	8424.89.30	8424.89.30
Parts of spraying appliances for etching, stripping or cleaning semiconductor wafers	8424.90.90	8424.90.23
Machines for working any material by removal of material, by laser or other light or photo-beam in the production of semi-conductor wafers	8456.10.60	8456.10.10
Apparatus for stripping or cleaning semiconductor wafers	8456.99.70	8456.91.00
Machines for dry-etching patterns on semiconductor materials	8456.91	8456.91
Focused ion beam milling machines to produce or repair masks and reticles for patterns on semiconductor devices	8456.99.10	8456.99.10
Laser cutters for cutting contacting tracks in semiconductor production by laser beam	8456.10.60	8456.99.20 8456.99.30 8456.99.40 8456.99.90
Machines for sawing monocrystal semiconductor boules into slices, or wafers into chips	8464.10.00	8464.10.11 8464.10.12 8464.10.19 8464.10.90
Grinding, polishing and lapping machines for processing of semiconductor wafers	8464.20.10	8464.20.11
Dicing machine for scribing or scoring semiconductor wafers	8464.10.00 8464.90.10	8464.90.11
Parts for machines for sawing monocrystal semiconductor boules into slices, or wafers into chips	8466.91.10 8466.91.50 8466.10.40 8466.20.40 8466.30.45	8466.91.90
Parts of dicing machines for scribing or scoring semiconductor wafers	8466.91.10 8466.91.50 8466.10.40 8466.20.40 8466.30.45	8466.91.90

Description of products	Tariff item US HS 2002	Tariff item Singapore HS 2003
Parts of grinding, polishing and lapping machines for processing of semiconductor wafers	8466.91.10 8466.91.50 8466.10.40 8466.20.40 8466.30.45	8466.91.10
Parts of focused ion beam milling machines to produce or repair masks and reticles for patterns on semiconductor devices	8466.93.15 8466.93.47 8466.93.60 8466.93.85 8466.10.40 8466.20.40 8466.30.45	8466.93.10
Parts of laser cutters for cutting contacting tracks in semiconductor production by laser beam	8466.93.15 8466.93.47 8466.93.60 8466.93.85 8466.10.40 8466.20.40 8466.30.45	8466.93.20 8466.93.30 8466.93.90
Parts of machines for working any material by removal of material, by laser or other light or photon beam in the production of semiconductor wafers	8466.93.15 8466.93.47 8466.93.60 8466.93.85 8466.10.40 8466.20.40 8466.30.45	8466.93.10
Parts of apparatus for stripping or cleaning semiconductor wafers	8466.93.15 8466.93.47 8466.93.60 8466.93.85 8466.20.40 8466.30.45	8466.93.10
Parts of machines for dry etching patterns on semiconductor wafers	8466.93.15 8466.93.47 8466.93.60 8466.93.85 8466.20.40 8466.30.45	8466.93.10
Encapsulation equipment for assembly of semiconductors	8477.10.70 8477.40.40 8477.59.40	8477.10.10 8477.10.31 8477.10.32 8477.10.39
Parts of encapsulation equipment	8477.90.15 8477.90.35 8477.90.55 8477.90.75	8477.90.10 8477.90.20 8477.90.31 8477.90.32 8477.90.39 8477.90.40
Automated machines for transport, handling and storage of semiconductor wafers, wafer cassettes, wafer boxes and other material for semiconductor devices	8428.39.00 8428.90.00 8428.20.00 8428.33.00	8479.50.10
Apparatus for growing or pulling monocrystal semiconductor boules	8479.89.84	8479.89.10
Apparatus for physical deposition by sputtering on semiconductor wafers	8543.89.10	8479.89.20 8479.89.30 8479.89.40

Description of products	Tariff item US HS 2002	Tariff item Singapore HS 2003
Apparatus for wet-etching, developing, stripping or cleaning semi-conductor wafers and flat panel displays.	8424.89.30 8464.90.10 8464.90.60 8479.89.84 8424.89.50 8479.89.87	8479.89.20 8479.89.30 8479.89.40
Die attach apparatus, tape automated bonders, and wire bonders for assembly of semiconductors	8515.80.00 8479.89.84	8479.89.20 8479.89.30 8479.89.40
Encapsulation equipment for assembly of semiconductors	8477.10.70 8477.40.40 8477.59.40	8479.89.20 8479.89.30 8479.89.40
Epitaxial deposition machines for semiconductor wafers	8479.89.84	8479.89.10
Machines for bending, folding and straightening semiconductor leads	8462.21.40 8462.29.40	8479.89.20 8479.89.30 8479.89.40
Physical deposition apparatus for semiconductor production	8543.89.10	8479.89.20 8479.89.30 8479.89.40
Spinners for coating photographic emulsions on semiconductor wafers	8479.89.84	8479.89.20 8479.89.30 8479.89.40
Parts of apparatus for physical deposition by sputtering on semiconductor wafers	8543.90.10	8479.90.20 8479.90.30 8479.90.40
Parts for die attach apparatus, tape automated bonders, and wire bonders for assembly of semiconductors	8515.90.10 8479.90.94	8479.90.20 8479.90.30 8479.90.40
Parts for spinners for coating photographic emulsions on semiconductor wafers	8479.90.94	8479.90.20 8479.90.30 8479.90.40
Parts of apparatus for growing or pulling monocrystal semiconductor boules	8479.90.94	8479.90.10
Parts of apparatus for wet etching, developing, stripping or cleaning semiconductor wafers and flat panel displays	8424.90.90 8466.91.10 8466.91.50 8479.90.94 8466.20.40 8466.30.45	8479.90.20 8479.90.30 8479.90.40
Parts of automated machines for transport, handling and storage of semiconductor wafers, wafer cassettes, wafer boxes and other material for semiconductor devices	8431.39.00	8479.90.20 8479.90.30 8479.90.40
Parts of encapsulation equipment for assembly of semiconductors	8477.90.15 8477.90.35 8477.90.55 8477.90.75	8479.90.20 8479.90.30 8479.90.40
Parts of epitaxial deposition machines for semiconductor wafers	8479.90.94	8479.90.10

Description of products	Tariff item US HS 2002	Tariff item Singapore HS 2003
Parts of machines for bending, folding and straightening semiconductor leads	8479.90.20 8466.94.20 8466.94.40 8466.94.55 8466.94.75 8466.10.40 8466.20.40 8466.30.45	8479.90.20 8479.90.30 8479.90.40
Parts of physical deposition apparatus for semiconductor production	8543.90.10	8479.90.20 8479.90.30 8479.90.40
Injection and compression molds for the manufacture of semiconductor devices	8480.71.40	8480.71.20
Resistance heated furnaces and ovens for the manufacture of semi-conductor devices on semi-conductor wafers.	8514.10.00	8514.10.11 8514.10.19
Inductance or dielectric furnaces and ovens for the manufacture of semi-conductor devices on semi-conductor wafers.	8514.20.60	8514.20.11
Apparatus for rapid heating of semiconductor wafers	8514.30.60	8514.30.11 8514.30.12 8514.30.19 8514.30.90
Parts of resistance heated furnaces and ovens for the manufacture of semiconductor devices on semiconductor wafers	8514.90.80	8514.90.10
Parts of apparatus for rapid heating of wafers	8514.90.80	8514.90.90
Parts of furnaces ovens of heading no. 8514 10 to no. 8514 30	8514.90.80	8514.90.90
Wafer probers	8536.90.40	8536.90.10
Ion implanters designed for doping semiconductor materials	8543.11	8543.11
Apparatus for wet etching, developing, stripping or cleaning semiconductor wafers and flat panel displays	8424.89.30 8464.90.10 8464.90.60 8479.89.84 8424.89.50 8479.89.87	8543.30.10
Parts of apparatus for wet etching, developing, stripping or cleaning semiconductor wafers and flat panel displays	8424.90.90 8466.91.10 8466.91.50 8479.90.94 8466.20.40 8466.30.45	8543.90.30
Parts of ion implanters for doping semiconductor materials	8543.90.64 8543.90.84	8543.90.30
Apparatus for the projection, drawing or plating circuit patterns on sensitized semiconductor materials or flat panel displays	9010.41.00 9010.42.00 9010.49.00 9010.50.60	9010.41.00 9010.42.00 9010.49.00
Parts and accessories of the apparatus of Heading No 9010 41 to 9010 49	9010.90.70	9010.90.20
Optical stereoscopic microscopes fitted with equipment specifically designed for the handling and transport of semiconductor wafer or recticles	9031.41.00	9011.10.10 9011.10.90
Photomicrographic microscopes fitted with equipment specifically designed for the handling and transport of semiconductor wafers or recticles	9031.41.00	9011.20.10 9011.20.90

Accumulation of Origin in the JUSFTA

Description of products	Tariff item US HS 2002	Tariff item Singapore HS 2003
Parts and accessories of optical stereoscopic microscopes fitted with equipment specifically designed for the handling and transport of semiconductor wafers or reticles	9031.90.54	9011.90.10 9011.90.90
Parts and accessories of photomicrographic microscopes fitted with equipment specifically designed for the handling and transport of semiconductor wafers or reticles	9031.90.54	9011.90.10 9011.90.90
Electron beam microscopes fitted with equipment specifically designed for the handling and transport of semiconductor wafers or reticles	9031.80.40	9012.10.10 9012.10.90
Parts and accessories of electron beam microscopes fitted with equipment specifically designed for the handling and transport of semiconductor wafers or reticles	9031.90.70	9012.90.10 9012.90.90
Pattern generating apparatus of a kind for producing masks and reticles from photoresist coated substrates	9017.20.50	9017.20.40 9017.20.50 9017.20.90
Parts and accessories for pattern generating apparatus of a kind used for producing masks or reticles from photoresist coated substrates	9017.90.00	9017.90.10 9017.90.20 9017.90.30 9017.90.40 9017.90.90
Parts and accessories of such pattern generating apparatus	9017.90.00	9017.90.10 9017.90.20 9017.90.30 9017.90.40 9017.90.90
Instruments and apparatus for measuring or checking semiconductor wafers or devices	9030.82	9030.82
Parts and accessories of instruments and apparatus of subheading 9030.82	9030.90.64	9030.90.20 9030.90.30
Parts of instruments and appliances for measuring or checking semiconductor wafers or devices	9030.90.84	9030.90.20 9030.90.30
Optical instruments and appliances for inspecting semiconductor wafers or devices or for inspecting masks, photomasks or reticles used in manufacturing semiconductor devices	9031.41.00 9031.49.70	9031.41
Optical instruments and appliances for measuring surface particulate contamination on semiconductor wafers	9031.49.70	9031.49.10 9031.49.20 9031.49.30 9031.49.90
Parts and accessories of optical instruments and appliances for inspecting semiconductor wafers or devices or for inspecting masks, photomasks or reticles used in manufacturing semiconductor devices	9031.90.54	9031.90.11
Parts and accessories of optical instruments and appliances for measuring surface particulate contamination on semiconductor wafers	9031.90.54	9031.90.11
Computers: automatic data processing machines capable of 1) storing the processing program or programs and at least the data immediately necessary for the execution of the program; 2) being freely programmed in accordance with the requirements of the user; 3) performing arithmetical computations specified by the user; and 4) executing, without human intervention, a processing program which requires them to modify their execution, by logical decision during the processing run. The agreement covers such automatic data processing machines whether or not they are able to receive and process with the assistance of central processing unit telephony signals, television signals, or other analogue or digitally processed audio or video signals. Machines performing a specific function other than data processing, or incorporating or working in conjunction with an automatic data processing machine, and not otherwise specified under Attachment A or B, are not covered by this agreement.	8471	8471

Description of products	Tariff item US HS 2002	Tariff item Singapore HS 2003
Electric amplifiers when used as repeaters in line telephony products falling within this agreement, and parts thereof.	8518.40.10 8518.90.20 8518.90.60	8517.50
Flat panel displays (including LCD, Electro, Luminescence, Plasma and other technologies) for products falling within this agreement, and parts thereof.	8471.60.10 8471.60.30 8471.60.45 8471.49.24 8471.49.15 8471.49.29 8473.30.10 8473.30.20 8473.30.50 8531.20.00 8531.90.15 8531.90.75 8543.89.92 8543.90.64 8543.90.84 9013.80.70 9013.90.50	8531.20.00 8471.60.29 8471.60.60 8471.60.90 8473.30.10 8473.30.20 8473.30.90 8531.90.10 8531.90.91 8531.90.92 8531.90.99 8543.90.10 8543.90.20 8543.90.30 8543.90.40 8543.90.50 8543.90.60 8543.90.70 8543.90.80 8543.90.90
Network equipment: Local Area Network (LAN) and Wide Area Network (WAN) apparatus, including those products dedicated for use solely or principally to permit the interconnection of automatic data processing machines and units thereof for a network that is used primarily for the sharing of resources such as central processor units, data storage devices and input and output units – including the adapters, hubs, in – line repeaters, converters, concentrators, bridges and routers, and printed circuit assemblies for physical incorporation into automatic data processing machines and unit thereof.	8471.80.10 8471.80.40 8471.80.90 8471.49.60 8517.50.60 8517.50.90	8471.50
Monitors: display units of automatic data processing machines with a cathode ray tube with a dot screen pitch smaller than 0.4 mm not capable of receiving and processing television signals or other analogue or digitally processed audio or video signals without assistance of a central processing unit of a computer as defined in this agreement. The agreement does not, therefore, cover televisions, including high definition televisions.	8471.60.10 8471.60.35 8471.60.45 8471.49.15 8471.49.26 8471.49.29	8471.60
Optical disc storage units, for automatic data processing machines (including CD drives and DVD drives), whether or not having the capability of writing/ recording as well as reading, whether or not in their own housings.	8471.49.50 8471.70.60 8471.70.90	8471.70
Paging alert devices, and parts thereof	8527.90.86 8525.20.30 8529.10.70 8529.90.22 8529.90.75 8529.90.86	8527.90.10 8527.90.91 8527.90.92 8527.90.99 8529.90.91 8529.90.92 8529.90.93 8529.90.99

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Description of products	Tariff item US HS 2002	Tariff item Singapore HS 2003
Plotters whether input or output units of HS heading No 8471 or drawing or drafting machines of HS heading No 9017.	8471.60.51 8471.60.52 8471.60.53 8471.60.54 8471.60.55 8471.60.56 8471.60.57 8471.60.61 8471.60.62 8471.60.63 8471.60.64 8471.60.65 8471.60.66 8471.60.67 8471.49.31 8471.49.32 8471.49.33 8471.49.34 8471.49.35 8471.49.36 8471.49.37 9017.10.40 9017.20.70 9017.90.00	8471.60.11 8471.60.12 8471.60.13 8471.60.19 8471.60.21 8471.60.29 8471.60.20 8471.60.40 8471.60.50 8471.60.60 8471.60.90 9017.20.10 9017.20.20 9017.20.30 9017.20.40 9017.20.50 9017.20.90
Printed Circuit Assemblies for products falling within this agreement, including such assemblies for external connections such as cards that conform to the PCMCIA standard. Such printed circuit assemblies consist of one or more printed circuits of heading 8534 with one or more active elements assembled thereon, with or without passive elements "Active elements" means diodes, transistors, and similar semiconductor devices, whether or not photosensitive, of the heading 8541, and integrated circuits and micro assemblies of heading 8542.	8471.50.00 8473.30.10 8473.50.30 8473.10.20 8473.21.00 8473.29.00 8473.40.10 8504.40.60 8504.40.85 8504.90.20 8504.90.65 8517.50.10 8517.90.08 8517.90.36 8517.90.38 8517.90.44 8518.90.20 8518.90.60 8520.20.00 8522.90.45 8529.90.22 8531.90.15 8538.90.10 8543.90.64 9009.99.80 9009.99.40 9013.90.50 9017.90.00 9026.90.20 9026.90.60 9027.90.45 9027.90.54 9027.90.64 9027.90.84 9030.90.64 9030.90.84 9031.90.54 9031.90.70	8473.10 8473.21 8473.29 8473.30.10 8473.40 8473.50 8504.90 8517.90 8518.90 8522.90.10 8529.90.31 8529.90.32 8529.90.33 8529.90.34 8529.90.35 8529.90.36 8529.90.37 8529.90.39 8531.90 8538.90 8543.90 9009.90 9013.90 9017.90 9026.90 9027.90 9030.90
Projection type flat panel display units used with automatic data processing machines which can display digital information generated by the central processing unit.	8528.30.62	8471.60 8528.30

Description of products	Tariff item US HS 2002	Tariff item Singapore HS 2003
Proprietary format storage devices including media therefor for automatic data processing machines, with or without removable media and whether magnetic, optical or other technology, including Bernoulli Box, Syquest, or Zipdrive cartridge storage units.	8471.70 8471.49.50 8523.20.00 8523.90.00 8524.31.00 8524.39.40 8524.91.00 8524.99.40	8471.70 8523.20.90 8523.20.20 8523.90.10 8523.90.90 8524.31 8524.39 8524.91 8524.99.10 8524.99.30 852499.90)
Multimedia upgrade kits for automatic data processing machines, and units thereof, put up for retail sale, consisting of, at least, speakers and/or microphones as well as a printed circuit assembly that enables the ADP machines and units thereof to process audio signals (sound cards).	8517.50.10 8471.80.40	8473.30
Set top boxes which have a communication function; a microprocessor-based device incorporating a modem for gaining access to the internet, and having a function of interactive information exchange	8517.50.10 8525.10.10 8528.12.92	8517.50
Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight testing instruments; parts and accessories thereof:	9018.11 9018.12 9018.13 9018.14 9018.19	9018
Mechano-therapy appliances; massage apparatus; psychological aptitude-testing apparatus; ozone therapy, oxygen therapy, aerosol therapy, artificial respiration or other therapeutic respiration apparatus; parts and accessories thereof:	9019	9019
Orthopedic appliances, including crutches, surgical belts and trusses; splints and other fracture appliances; artificial parts of the body; hearing aids and other appliances which are worn or carried, or implanted in the body, to compensate for a defect or disability; parts and accessories thereof:	9021	9021